SPECIAL TIME EDITION

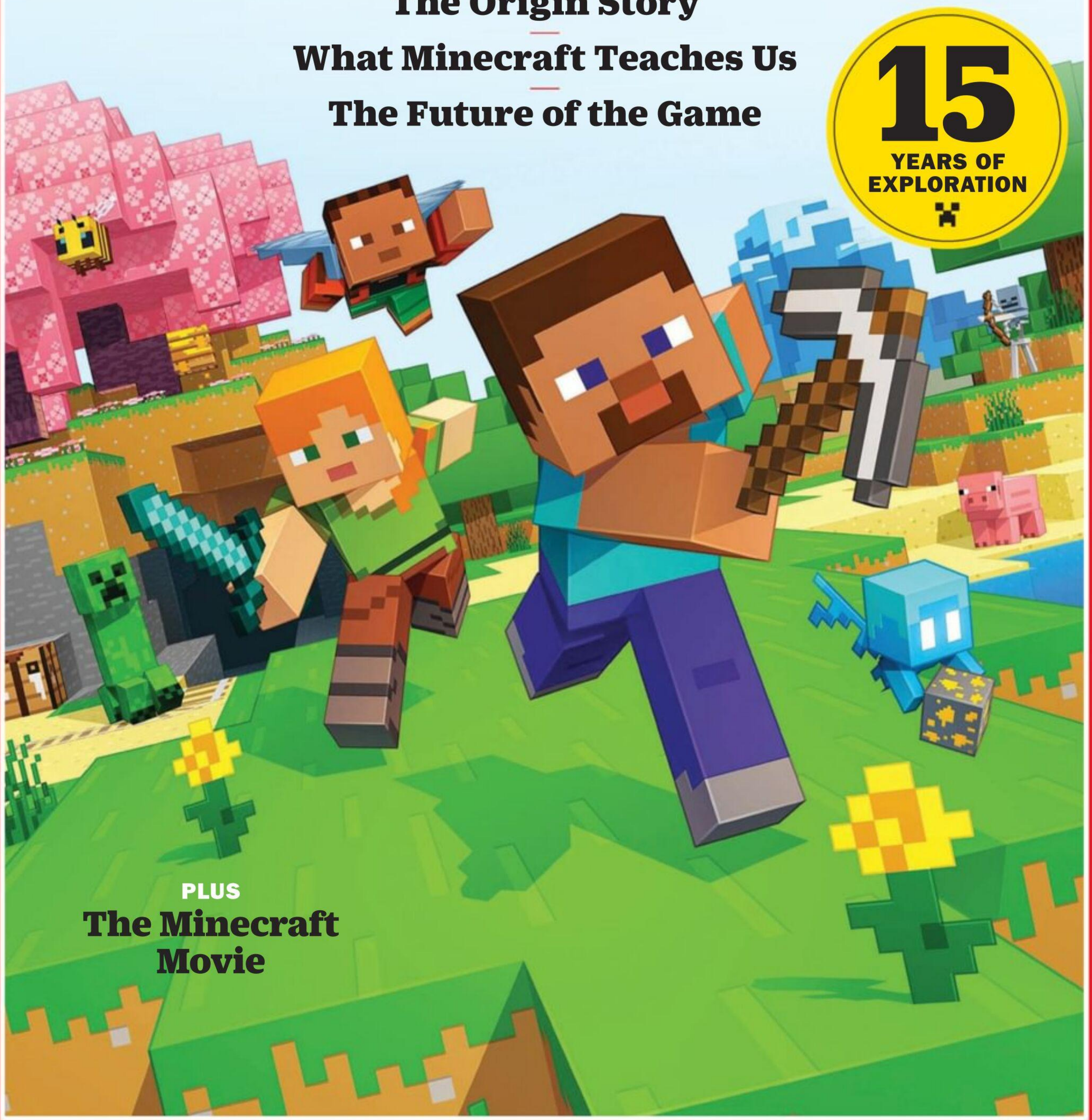
Minecraft

Building an Adventure. Building a World.

The Origin Story

What Minecraft Teaches Us

The Future of the Game



PLUS

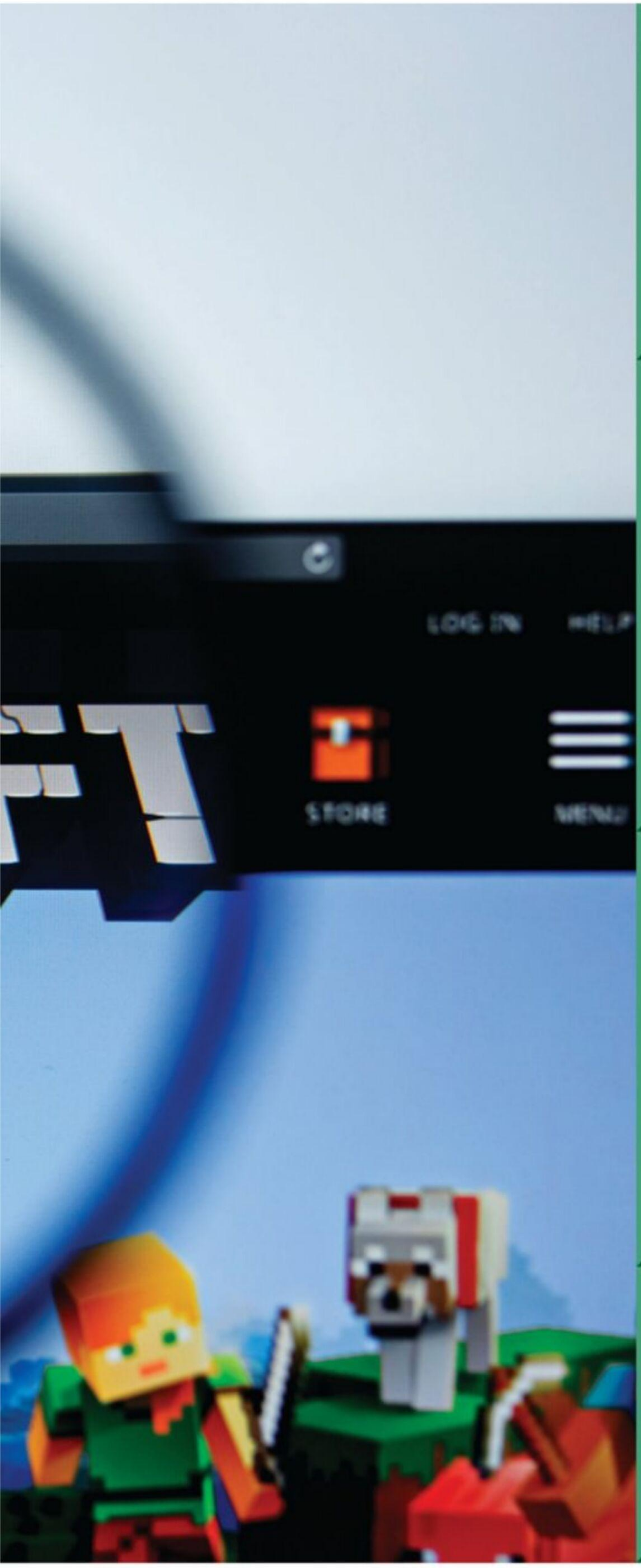
The Minecraft Movie

SPECIAL TIME EDITION

Minecraft

A Minecraft rendering of Westeros, the fictional land in the TV series Game of Thrones.

www.minecraft.net/en-us/
MINECRA
INECR
& MAC) - RUB 1,90



CONTENTS

4 15 Years of Minecraft

THE PHENOMENON

12 Minecraft's Origin Story
20 Top Minecraft Moments
24 The Best of Tricky Trials
26 The Minecraft Movie
29 Meanwhile, on TV…
30 More Gamer Movie Ideas
32 YouTubers Keep the Game Spicy
38 The Journey Goes Offline

THE VIRTUES OF MINECRAFT

44 Why Minecraft Is in So Many Schools
52 How Minecraft Education Got Its Start
54 Call It Liberation Tech
60 Your Child Plays Minecraft. Do You Need to Be Worried?
64 Neurodivergence and Minecraft

LET'S PLAY

68 Getting Off on the Right Foot
72 A Creator's Paradise
82 The Wild World of Mods
86 Building Everything on Earth
96 The End

THE MASTERMIND REFLECTS ON 15 YEARS OF MINECRAFT

Jens Bergensten, chief creative officer of Mojang, talks about how far the game has come, and where it will go

BY TRONE DOWD

When Jens Bergensten was hired by Sweden-based game studio Mojang Studios in 2010, he never imagined that the team's hit game would have the legacy that it has today. Instead, he saw it as the ideal starting point for a small team with big ambitions.

"At that time, Minecraft had sold 700,000 copies," Bergensten said. "For a small indie game to sell that well was unheard of [at the time]. So our mental picture of it was that we had peaked. We were going to finish up Minecraft and use the money to create new indie games."

In a short amount of time, however, it became clear that Minecraft wasn't just another indie hit. It was *the* indie hit.

It's hard to put into words how unprecedented Minecraft's success was. Its fast rise in popularity coincided with the social media boom of the early 2010s that allowed ideas coming from anywhere to be pushed into the stratosphere. It was an age when smaller projects from scrappy, self-started development teams were the source of the medium's coolest innovations. And thanks to mainstream acceptance of digital storefronts such as Steam, Xbox Live Arcade, and WiiWare, these smaller projects could find an audience without first needing to claim a spot on retail-store shelves.

Yet few indie games were as revolutionary as Minecraft. Simple to play but nearly limitless in its possibilities, it seemed mind-boggling that no one in game development up to this point had tried the surefire concept of "LEGO with the elements."

In the 15 years since its release, Minecraft has sold an astounding 300 million copies, a total that trails only Tetris, which has been around since 1984. The game enjoys a level of cultural penetration that few franchises do, with toy aisles across the world filled with Minecraft play sets and action figures, and kids everywhere sporting Minecraft lunch boxes and book bags.

Things aren't slowing down either. Next year, Minecraft makes its silver screen debut, in a movie with a star-studded cast that includes Jack Black and Jason Momoa.

Today, Bergensten serves as Minecraft's chief creative officer, taking over the role following Microsoft's acquisition of Mojang in 2014. He's less involved in its creative development these days but still has a fondness for the game that has molded his career, and which has become bigger than he ever imagined it could be.

TIME: Minecraft is celebrating 15 years. In that time, this little indie game you worked on with Markus Persson has become the most popular game in the world. Did you ever imagine the game could reach these heights?

JENS BERGENSTEN: The funny thing is, I was hired to work on a different game that eventually became

Tricky Trials is the latest update for Minecraft, which Jens Bergensten (opposite) oversees in his role as chief creative officer.

Scrolls. At that time, Minecraft had sold 700,000 copies. For a small indie game to sell that well was unheard of. So our mental picture of it was that we had peaked. We were going to finish up Minecraft and use the money to create new indie games.

But very quickly we realized it was just growing and growing. It keeps feeling that way. Minecraft hit its 15-year anniversary, it's bigger than ever, but I'm still like, Have we peaked? But history shows there's always more Minecraft. This was not the expectation when I started.

In America, we see games developed here that are deeply influenced by our culture. As a Swedish person, are there elements of Minecraft that reflect Swedish culture, customs, and sensibilities? What are those elements that you're most proud of?

We naturally are inspired by the environment around us. One very distinct thing is the silver birch trees in Minecraft, because they are very common in Sweden. When I added them to the game, some players didn't understand why there were these white trees with black spots on them. But to me, they were these natural things. It's subtle things like that that seep through to Minecraft.

Minecraft is huge with kids and with parents as well. As a father yourself, what are your thoughts on Minecraft's ability to bridge that generational gap? What does your son think of the franchise you helped create?

Before I had my own kid, we kept getting these stories about families connecting through Minecraft. There'd be grandparents who might live in another state or a different city who played Minecraft together as a way to hang out.

But now my son is 8 years old, and of course he's very into Minecraft. We just started a new world together the other day. It's become a way for us to hang out. Both me and my wife, we let him play as much Minecraft as he wants, because afterward he always has a story to tell. We feel that it's really interacting with the game and not just passively looking at YouTube Shorts or something.

Is there an ethos that remains at the core of how Minecraft evolves with its subsequent updates? Or is it seen as a game that can do and be anything?

When we look at vanilla [the basic, unmodified version of the game], we have a specific theme in mind. The inspiration for Minecraft that I keep referring to is that it's part Rollercoaster Tycoon, part Dungeon Master, and part Dwarf Fortress. Fantasy is also a core element. When we add things, new monsters, and such, we try to invent things that are unique to our game. We also have principles for the game design itself. We want to keep player interaction to one block at a time. We don't have copy-paste functionality or templates.

For everything else, we rely on and encourage the

Bergensten addressed the game's fans at Minecon 2012, in Paris.

community to provide that to players with the marketplace and Java modding. The community is creating these experiences that we don't prioritize for vanilla.

What is the most significant change to the game since Microsoft bought Mojang in 2014?

It actually started with making a version of Minecraft for the Windows Store, which we based on the Pocket Edition for phones. Over time, that became Minecraft's bedrock platform. And the greatest value of that effort has been that you can truly play cross-platform.

In families, you often have hand-me-down devices, but you can still play together, [and crossplay] enables them to play together no matter what they use.

Minecraft has spawned many competitors, from Terraria to Roblox to LEGO Fortnite. Do you admire any of them as a fellow game creative? If so, which games and what elements from these games do you appreciate the most?

I really like Terraria. I should clarify, I played it when it was new. They've been working on it for over 10 years now, so I don't know what it looks like today, but I played it a lot. Obviously, they took a lot of inspiration from Minecraft. But it also inspired me. One example I really liked was the way bosses worked. In Terraria, you summon them. They're essentially bosses on demand, and I thought that was very clever. And the Wither is an example of how that works in Minecraft. If you want to fight the Wither, you build the Wither and then you get the boss fight.

Are there any modern video games from the last four years that have sparked creativity within you?
I love Hades, which was released in 2020. It's one of my favorite games. I'm currently playing Dyson Sphere Program. I love that as well.

The next step in Minecraft's journey seems to be expanding to other media, such as film and television. How do you see this changing the game as we know it?
We have a large community of players, but we have an even larger community of fans participating by watching or interacting with Minecraft [through other means]. We want to be able to create experiences that are broader, outside the bubble of the ones that are playing Minecraft.

Have you seen footage from the Minecraft movie [slated for April 2025]? If so, what are your thoughts so far?
I was at the set when they were filming the principal photography in February. And that was a super fun experience because people on the set were so excited. You could feel the energy from the people working on props, the set masters, even the actors themselves. I got the chance to meet Jack Black. Great guy. He was playing Minecraft between shoots. He really takes his work seriously. He's very professional. When you meet these big stars, you're always a bit nervous. Like they don't want to be bothered. But he was very open and inviting to chat and hang out.

[MINECRAFT] IS BIGGER THAN EVER, BUT I'M STILL LIKE, HAVE WE PEAKED? BUT HISTORY SHOWS THERE'S ALWAYS MORE MINECRAFT.

—JENS BERGENSTEN

A couple of questions about the gaming industry in general: The last couple of years have been distressing for developers. Thousands of layoffs and studio closures have thrashed the industry. What are your thoughts on where the industry is at the moment and where it is heading, specifically for those who create the games we love?
I feel for the ones who have lost their jobs. It is tough. The gaming industry is still growing, and there will be players and opportunities for new storytelling. I'm not an expert on the macroeconomics of what's happening. But I'm hoping for a great rebound soon so all these talented people can get back to doing cool things.

In the last year, a small but influential subset of players and developers in the industry have decried efforts to make the games industry more inclusive and considerate of portraying ethnic backgrounds accurately, through consultation and DEI initiatives. What are your thoughts on the movement of players who say these efforts are ruining games?
For us, it has been very important that everyone feels welcomed and invited to participate. Not too long ago, we added new default characters. Steve is like the original Minecraft character, and we added Alex a few years later. One of the reasons we added Alex was to increase diversity. Then we took a step [in 2022] and added seven more characters. But we could be even better, to make sure everyone feels included no matter who they are. On the topic of people complaining about it, I really don't understand what they're complaining about, to be honest with you.

Stripping away all of your involvement in Minecraft, what keeps you playing the game all these years later?
It sounds a bit silly, but my favorite part is the building, the construction of creations. I play Survival Mode just as often as I play Creative Mode, just to build things. There's something very satisfying in creating new castles all the time. And now I can do that together with my son and that's a lot of fun.

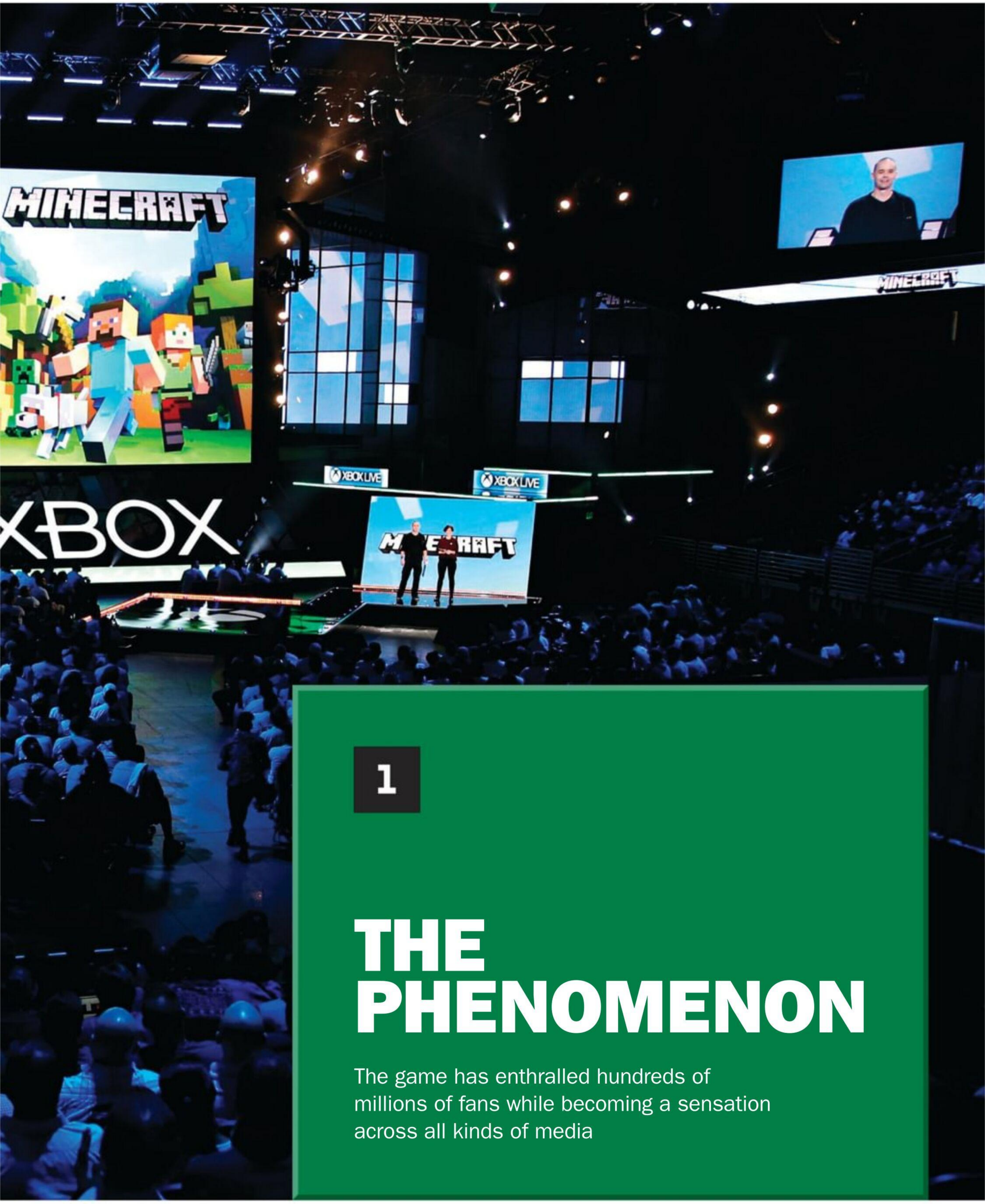
Bergensten (left) was among the coders at work on Minecraft at the Mojang offices in 2013.

When you look back at the last 15 years, what do you think the future holds for this franchise?
When I rewind 15 years and compare Minecraft [now] to then, of course there's more of everything: more players, more mobs, more environments, more platforms, more creators, and so forth. But the core, the basics of the game is still the same. If we look 15 years ahead, then we are very cautious to make sure that we keep that core. That is going to be the experience now and in 15 years. But we also want to make sure that the game continues to feel modern. Not just by adding new things, but also keep updating, and keeping in line with the times.

Minecraft 2: Will it ever exist?
I don't really see the need for a sequel. I think that we want to make sure that players who have invested so much time in their worlds in Minecraft feel that they can trust us to continue to improve the games. They can continue to play on the world. Thinking about the sequel, to me that is more of a way to get inspired. Like what would a sequel be, and how can we make Minecraft be its own sequel? That's how I look at it.

You were named one of TIME magazine's most influential people in 2013, along with game creator Markus Persson. Looking back, what are your thoughts on your inclusion on that list 11 years ago?
I remember when I was reading it, in the forward it said they were reflecting on people on that list from before and whether or not they actually deserved to be on that list or not, or if they managed to stay influential. I wouldn't say that I deserve to be on that list [today]. We are so many people working on Minecraft now. But if Minecraft was a person, then I'd say it would be on the list. ▯

Enthusiasts and media gathered to hear the details of the latest Minecraft update at the E3 conference in Los Angeles in 2016.



1

THE PHENOMENON

The game has enthralled hundreds of millions of fans while becoming a sensation across all kinds of media

Markus “Notch” Persson, left, and Jens Bergensten, the minds behind Minecraft.

MINECRAFT'S ORIGIN STORY

How a game from an independent Swedish company conquered the world

BY HARRY MCCRACKEN

BEGINNING IN DECEMBER 2011, JACOB Granberry and Will Blew began overseeing a land-development effort of truly epic proportions. Covering more territory than the city of Los Angeles, in 2013 it is about 70 percent complete and already contains roughly 8,000 structures. It's so sprawling and ambitious, though, that nobody knows for sure just what's there. "I haven't seen near everything, and I started the damn project," said Granberry.

Their undertaking happens to be a digital recreation of Westeros, the fabled continent from George R.R. Martin's A Song of Ice and Fire books and the HBO series based upon them, *Game of Thrones*. And Granberry and Blew happen to be creating all those castles, towers, farmhouses, shops, and ships in Minecraft, the online game from a Swedish start-up named Mojang that's inspiring millions of people of all ages to go on building sprees. This virtual Westeros may be exceptional in scale—more than 500 volunteers have participated in its creation so far—but it's also utterly typical of Mine-

craft. True, if all you want from a game is the ability to wander around a kingdom slaughtering zombies with a sword, you can get that from Minecraft. Millions do, and the game might have been a hit if that were all it offered.

But it isn't destruction that has made Minecraft unique and the most popular video game of the millennium, with more than 300 million copies sold. It's construction. The game is a Disneyland where the attractions are built by the visitors. (Sometimes literally: Players have painstakingly re-created the Anaheim, Calif., theme park, complete with working rides.) Think of a notable real or fictional locale, from Rockefeller Center to Hogwarts, and the odds are pretty good that there's a spectacular rendition of it in Minecraft. Maybe several. Plenty of players use it to imagine worlds that exist nowhere else. And everything's made out of blocks measuring one cubic meter apiece. Now, insanely addictive video games, it's fair to say, usually don't have fabulous reputations among the unaddicted. At best they may be regarded as irritating time sinks (Farmville), at worst as potential threats to society (any violent game allegedly played by someone who turns out to be a mass murderer).

Minecraft is different. The deeper you get into it, the more it looks like a form of self-education masquerading as entertainment, which is why parents tend not to see it as a scourge and teachers are bringing it into the classroom. "It follows rules, just like the real world," says Mark Frauenfelder, the founding editor in chief of *Make:* magazine, the bible of the do-it-yourself hobbyists of all ages who constitute the thriving maker movement. "You put together materials with varying properties. You have to be aware of physics. You have to understand levers and ramps and can even build electric circuits."

No less lofty an authority than the United Nations has seen Minecraft as a tool to improve human life. In September 2012, its U.N.-Habitat agency teamed with Mojang to launch a program called Block by Block, which asked users to digitally reimagine 300 run-down public spaces in the next three years, giving people who live near them the chance to chime in on how they might be improved. The first candidate was a dilapidated park in Nairobi's business district and parts of its Kibera slum. "Someone says, 'Ah, we'd like to have a skateboard ramp,'" said Thomas Melin, then with U.N.-Habitat. "And click, click, click, there's a skateboard ramp."

Mojang—the name is the Swedish word for *gadget*—didn't set out to create a phenomenon or a big business. But Minecraft is both. Though it has since been acquired by Microsoft, in 2014, the game began as an indie smash in an era dominated by blockbusters, sequels to blockbusters, and would-be blockbusters bankrolled by giant corporations such as Activision Blizzard and EA. Mojang grossed almost $240 million in 2012, nearly all from sales of Minecraft; the PC version at that time sold for $26.95. All that happened without any funding from outside investors

Persson, in foreground, and Bergensten, far left, in the game's early years.
Opposite: Dwarf Fortress, a 2006 game that influenced Minecraft.

or much of a marketing plan beyond cultivating a community on Twitter, Tumblr, Reddit, and other online hangouts.

Mojang was—and is—headquartered in Stockholm's Sodermalm district, far from the industry's giants, in an area thick with trendy restaurants, quaint shops, and small companies. (The area has gentrified considerably since it served as the setting for much of Stieg Larsson's *The Girl with the Dragon Tattoo* and its sequels.)

In 2009, Mojang didn't exist, and Minecraft was a personal project by game developer Markus Persson, who preferred to be called Notch. Notch, who would become Mojang's cofounder and resident visionary, created Minecraft for one simple reason: He wanted it to exist. "I designed the game for myself—that's an audience I know," he told me in 2013, when we met in an intentionally gauche, James Bond–inspired Mojang conference room decked out entirely in gold materials. Bearded, cherubic, and self-effacing, Notch looked like a gamer, though not necessarily the leader of gamers he had become. Like most programmers, he began young, writing an adventure game for his father's computer at 8 years old. When we spoke, Notch cheerfully admitted that he didn't summon the concept that became Minecraft out of thin air. He said he drew crucial inspiration from Dwarf Fortress, a famously innovative, idiosyncratic, and opaque fantasy simulation released in 2006. (Tech site Ars Technica called it "the most inscrutable video game of all time.") An even more direct ancestor is Infiniminer, a 2009 game that was much like Minecraft—except for the fact that its inventor lost interest in it almost as soon as it was finished. Unlike Infiniminer's creator, Notch kept plugging away. At first he worked on the game in spare moments while continuing in his job at a Stockholm company that made photo-album software. But long before the game was finished, he found that people were willing to pay for it. "The idea

The United Nation's Block by Block program showed the game's capacity for social good by creating renovation plans for run-down public spaces. The program reaped benefits in (clockwise from top left) Nairobi, Kenya; Kampala, Uganda; Khulna, Bangladesh; and Pristina, Kosovo.

was to be self-sustaining," he said. "I started charging for the game a couple of weeks in."

A little over a year into the effort, he went full time. By early 2011, Minecraft the project had turned into Mojang the company, complete with a real office and actual coworkers. Along the way, Notch was quietly courting the growing community of Minecraft fanatics. He released experimental versions, blogged about his game-design decisions as he made them, and uploaded teaser videos to YouTube. He also let players mold the game in ways he had never envisioned, using customization programs known as mods to add everything from volcanoes to zeppelins to their Minecraft worlds. What those players were so enthusiastic about was a game that was both simple and deep. Minecraft, Notch said, "has a lot of complexity—but most of that complexity is optional." There are two primary ways to play. In Survival Mode, you can't even begin building stuff out of blocks made of various materials, from iron to sandstone to quartz, until you've fashioned your own tools and mined, found, or otherwise acquired the blocks. Assuming you're not killed on your first night by a horde of monsters. No matter how adept you are, building an accurate copy of something like the Arc de Triomphe in Survival Mode might be impossible. That's why the game also offers Creative Mode, which eliminates risks to the player's well-being, adds the ability to fly, and provides an unlimited supply of construction materials. Essentially, it's the world's greatest box of LEGO pieces. For the record, Notch says he wasn't thinking about the iconic Danish building toy when he created Minecraft but concedes that it was probably a subconscious influence, since he played a lot of LEGO as a kid.

In either mode, the world of Minecraft didn't look that much like our world. Everything was rendered in a first-person view but with a low-resolution, pixilated effect, as if it were the most impressive new game of 1988. Players were represented by a default

character nicknamed Steve—a swarthy blockhead with no neck, hands, or feet. Even the monsters are too cute to be monstrous. Minecraft's graphics are so rudimentary, Notch says, because they were the best he could muster when he was getting started. But his lack of artistic ability turned into one of the game's defining traits. "A tree doesn't look like a tree, but you know it's a tree. It makes it feel more real, because a larger part of it takes place in your imagination."

In November 2011, Notch officially completed work on Minecraft 1.0. Then he did something unexpected: He fired himself just as his creation was becoming a huge success. "I played it for too many hundreds of hours," he recalled. "After a couple of years at a job, I get bored at it and want to start something new. It starts to get frustrating after a while even if it's fun."

Notch began hatching plans for a new game and turned over primary responsibility for the game to his right-hand man, Jens Bergensten, a ponytailed redhead better known in the Minecraft community as Jeb. Conspiracy theorists may have trouble accepting the notion that Notch truly handed off Minecraft supremacy to Jeb, who was 32 at the time, while remaining on the Mojang premises. (Obvious parallel: Pope Benedict XVI and Pope Francis cohabiting the Vatican.) But both men insisted to me that the transfer of power has been real and effective. "When [Notch] stepped down as lead developer, he stopped playing Minecraft, more or less," says Jeb. "He was afraid that if he came with suggestions for the game, he'd be commanding what we should do." The long-term vision that Notch and Jeb share for Minecraft was based in part on not obsessing over long-term vision. Mojang releases a few updates with new features each year; at the time I visited the company in Stockholm, it had just shipped version 1.5. "When it came out, we were already working on 1.6," Jeb says. "That's very unusual that we knew what was coming. For 1.7, we have a couple of options. But what it looks like in a year, I have no idea." Judging from Minecraft's history, it's the game's players, at least as much as its creators, who will determine its future. They'll continue to design new worlds and useful mods, share their work on YouTube, and generally provide most of the incentive for fellow players to spend time with the game.

For Mojang, getting in the way of the players would be more dangerous than making sure they have free rein to build, build, build. A lot of those builders are kids. Minecraft attracts enormous numbers of teens, preteens, and nowhere-near-teens; children as young as 3 are entranced by it. Notch says he didn't plan it that way and isn't sure why kids like Minecraft so much: "I might be a little childish," he mused. "Or maybe children have really good taste in games." Even if it was an accident, Minecraft is a game that both kids and their parents can love. While there's combat and conflict, it has none of the graphic ghoulishness of other best-selling titles such as Call of Duty, which features severed limbs, exploding heads, gushing blood, and rotting bodies, all rendered in as much detail as possible. "I'm grateful that Notch said from the beginning that he didn't want gore," says Jeb. "There's violence, but it's cartoonish."

"I MIGHT BE A LITTLE CHILDISH. OR MAYBE CHILDREN HAVE REALLY GOOD TASTE IN GAMES."

—MARKUS PERSSON

Kids become fans for different reasons. "For me, it's like, you can do anything," said 12-year-old Noah Sokolsky of Fanwood, N.J. "There's always a surprise—every block you break, every block you build, every step you take. It's exciting." Noah's 9-year-old brother, Joshua, is a fan too, but for more primal reasons: "You get to have all these weapons and fight monsters. I rarely build." Eric, their father, has a guardedly positive attitude toward the game, though he does worry about it becoming a 24/7 fixation. (He admits to once secretly unplugging the household's internet router to foil plans by Noah and a sleepover buddy to begin playing Minecraft at 3 a.m.)

The luckiest young players get to spend time in Minecraft at school as well as at home. In 2013 MinecraftEdu, a partnership of Minecraft enthusiasts in Finland, Spain, and New York City, helped teachers use the game as a virtual classroom for everything from geography to math to art; the company has sold its education-ready version of the game to about 1,200 schools to date. "We have been looking at 10 percent to 20 percent growth per month in schools that are using it," says cofounder and CEO Santeri Koivisto. "We don't see any end to this." MinecraftEdu has since evolved into the Minecraft Education edition, first released in 2016 (*see page 44*).

As with other aspects of the ever-expanding Minecraft community, the game's creators are supportive

of its uses in education but happy to let someone else take the lead. Mojang's willingness to hand off oversight for key parts of the Minecraft ecosystem aligned with an expressed desire to stay small. In 2013, cofounder Carl Manneh, who served as CEO, described one of his principal responsibilities as turning down proposals from would-be investors and producers of merchandise. "In business decisions, it's easier to say yes, but I hear myself saying no all the time." Of course within a year the company would be saying yes to Microsoft, at a price of $2.5 billion. But before the sale, the company's offices showed signs of only minor splurging. The team could still squeeze around one unusually lengthy dining-room table. "We're growing too fast," laments Jeb. "When I started, the plan was to be no more than 15 people. Then suddenly, no more than 25. Now we're almost 30 and looking to hire more programmers." (At the time the industry's largest company by revenue, Activision Blizzard, had 6,700 employees.) Despite all those times saying no, the company's finally saying yes to being purchased felt like something of an inevitability.

In 2013 Notch's ambitions were centered around a game he was developing called 0x10c. (He pronounced the title "10 to the c" but says others are free to call it whatever they want.) The space-travel saga was set in the year A.D. 281474976712644, and he had started releasing tantalizing videos of his work in progress, just as he had when Minecraft was new. At the time Notch said the game's development was going "very, very slow. I feel creatively trapped. I'm stressed out from it—it's hard to tell if the game is going to be fun." In fact, Notch sounds nostalgic for Minecraft's earliest days. "It was easier when nobody knew who I was," he says. "Now, if I tweet a picture, millions of people scrutinize it. I'm still having fun, but I feel like I've drifted away from programming." The drift was a serious one. Notch eventually abandoned 0x10c, citing burnout, and it has never been released to the public.

One factor may have been that Minecraft was so successful that there was no pressure to release a new game. The abandonment of 0x10c is now a blip on the corporate radar. "We can pile up money from Minecraft and make games," said Notch, sounding upbeat again and perhaps slightly boastful, "and even if they're not successful, we can still make games." To use Minecraft's language, the company at that point was playing in Creative Mode, not Survival Mode, and was set up to do so for as long as it possibly could. ▯

The game has continually evolved, with the Nether Update in 2020 adding new mobs and biomes to that world.

The 2015 Minecon felt like a watershed because fans seemed to be there for the community more than to meet the game's creators.

MOMENTS THAT MATTERED

Selected highlights from the game's first 15 years

BY BILL SYKEN

THE PLAYERS OF MINECRAFT AREN'T the only ones who are constantly building. It's true of the creators as well. Ever since the first version of the game launched in May 2009, the game's architecture and experience have been continually modified, expanded, and honed. Here are ten of the notable highlights of Minecraft's journey of transformation.

OCTOBER 2010 The Nether is added to Minecraft. Thanks to the "Halloween update," suddenly players could go through a portal and pass from the Overworld into this dark place, encountering lava that flows like water and zombie pigmen, fire-breathing ghosts, and other horrors. This new environment escalated the fantasy aspects of the Minecraft world.

JUNE 2011 The massive Adventure Update includes Creative Mode. A great deal was added to the game at this time—the extremely long list includes mountains, biomes, cave spiders, fence gates, and melon seeds for farming—but adding Creative Mode is

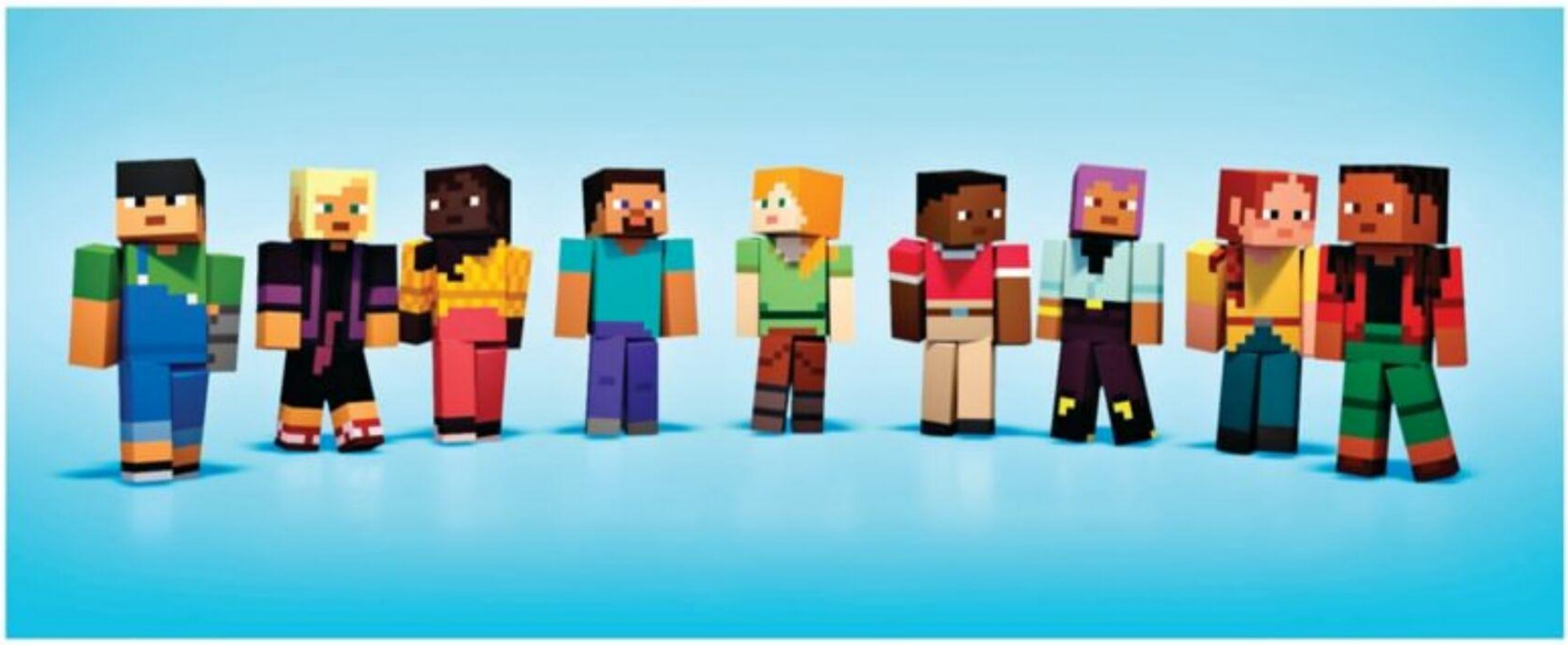
important because it allows players who love to build things to focus on that aspect of the game without having to worry about fending off mobs or developing food sources or other pesky matters of survival. The ultimate sandbox game suddenly was safe for the type of player whose chief interest was building the biggest sandcastles possible.

NOVEMBER 2011 Mojang officially launches what is now known as Minecraft 1.0—although the game, through its early iterations, already had become quite popular by this point, with more than a million users. In fact the launch of this version was announced at the first Minecon, a fan gathering held at the Mandalay Bay resort in Las Vegas. It's fitting that among the new elements was the End, a sort of final destination to reach in the Minecraft universe—complete with an End Poem. It was the last version in which the game's initial creator, Markus "Notch" Persson, was involved.

MAY 2012 Minecraft releases the first version of its game for Xbox, marking a move from PCs to consoles. The game would come to Playstation in 2013 and to its first Nintendo device in 2015—with it finally reaching Nintendo's Switch in 2017, at which point TIME called the Switch iteration "the best version yet," owing largely to Switch's portability.

MARCH 2013 The Redstone Update. The color of this new mineral resembles that of the ruby slippers Dorothy wears in *The Wizard of Oz*, which is appropriate because its introduction was as significant to Minecraft as the switch from black-and-white to color was in the Hollywood classic. Redstones are, in essence, electricity, and they allow builders to become engineers. While Redstone had been a part of Minecraft since 2011, this update greatly increased its capabilities. Players can use Redstone to automate their farms, build elevators and other powered devices, and even, for those who are ambitious and skilled, construct working computers inside Minecraft.

2014 Microsoft buys Mojang for $2.5 billion. Fans of Minecraft had reason to be nervous about this deal. Suddenly the independent Swedish company that developed Minecraft was being taken over by a corporate behemoth from America. And Microsoft, thanks in part to years of the effective "I'm a Mac/I'm a PC" advertising campaign from Apple, didn't have the reputation for being especially cool or creative. At the time of the deal, TIME ran a story with a headline that captured the tension of the moment: "Dear Microsoft: Please Don't Screw Up Minecraft. Sincerely, Parents." The concern was even shared by employees at Mojang, who were apprehensive about welcoming their new overlords. There have been inevitable fan rants about how Microsoft has ruined everything—decrying updates that added elements beyond the spirit of the original and pulled Minecraft in the direction of a role-playing game has been a typical theme. But just about every enterprise except maybe WD-40 evolves in one direction or another. Jens Bergensten, chief creative officer of Minecraft, has described the deal as giving Mojang the ability to pursue the overwhelming number of creative ideas they have. "It gave the opportunity to really expand and use Minecraft to do more and good things," he said in a video on the game's 15th anniversary. "It also meant we were finally growing up, I think. And I think we would have been forced to do that regardless, because it was not really sustainable for the company or even for the game."



Minecraft made its first move from PCs to consoles in 2012 with a version for Xbox. Opposite: A 2022 update brought new and diverse options for player identities.

JULY 2015 Crafters gather for Minecon in London. After the first convention in Vegas, further gatherings were staged in Paris in 2012 and in Orlando in 2013. But Mans Olson, creative director of internal new games at Mojang, who had been to previous cons, believed that he noticed a fundamental change at the London event. "You could absolutely see how the community had taken off," said Olson. "Instead of caring so much about us and the people at Mojang, it was really the community coming together and kind of celebrating itself." The London gathering was also the second-to-last Minecon to be held in person. In 2017 the event moved online and has continued as a livestream.

NOVEMBER 2017 The first mob vote takes place at the first virtual Minecon. Bergensten presented preliminary black-and-white sketches of four potential creatures to be added to the Minecraft universe and gave fans the opportunity to vote one in. The Phantom won out over the other choices—the Barnacle, the Great Hunger, and the Wildfire—though inevitably fans wanted them all, not entirely appreciating the programming involved in transforming a two-dimensional drawing into an animated creature that moves in the Minecraft ecosystem. Mob votes have become an annual tradition.

JULY 2018 The Aquatic Update. This new version brings unprecedented richness to the Minecraft oceans. Suddenly the coral reefs—increasingly endangered in our real world because of the warming of the seas—were flourishing in the online counterpart and creating appreciation of this glorious but fragile ecosystem. Aleksandra Zajac, people operations specialist at Mojang, called this update "a perfect example of how Minecraft affects the world."

OCTOBER 2022 Identity options expand. In the earliest versions of the game everyone started as a character named Steve, and then in 2014 players were given the choice of being Alex. But in this update the options multiplied and diversified, with the addition of Noor, Sunny, Ari, Zuri, Makena, Kai, and Efe. It was the latest step in transforming a game that had began humbly in Sweden into a true global phenomenon. ▯

The Best of Tricky Trials

Breaking down the most welcome additions in this year's update

BY TRONE DOWD

The ever-evolving game of Minecraft got its latest update this summer. Update 1.21, dubbed Tricky Trials, adds a slate of enemies, blocks, tweaks, crops, and gameplay scenarios that expand on Minecraft's exploration and swashbuckling elements.

The star of this expansive update is the titular, procedurally generated dungeonlike Trials Chambers. These hidden structures, inspired by Meso-American architecture, can be found in any world and offer a challenge for which even the most grizzled Minecraft veteran might need a friend or two to complete.

For those who manage to make it to the end of these elusive chambers, rewards await. From enchanted wearables and magical weapons to rare crafting materials and game-altering consumables, the rewards of tackling these new environments and the obstacles within are a fun and engaging way to strengthen your characters and structures.

In the grand scheme of things, Tricky Trials isn't the most ambitious Minecraft update. It's not reinventing or advancing Minecraft's core gameplay loop like the game's pivotal Adventure Update did in 2011. Nor does it expand on the fiction in ways that will forever change how fans view the universe's more supernatural elements, as did 2020's long-overdue Nether Update.

But what Tricky Trials does extremely well is add some much welcome depth to an underrated part of the game. Dungeon crawling in search of valuable resources has always been a pillar of Minecraft's appeal. Adding this alternative way to roll cool loot feels fresh to the game, even as it is reminiscent of other popular games such as Blizzard's Diablo and Nintendo's timeless Legend Of Zelda. And with the added bonus of being able to tackle these dungeons in groups, Tricky Trials is sure to keep players busy until the game's next big drop.

Let's take a look at some of Tricky Trials coolest additions.

Beware the Trial Chambers

Let's start with a deeper dive into the well-designed centerpiece of this update. The Trial Chambers gamify loot discovery in a way most players of other games should appreciate. These mazelike structures will test your resolve, thanks to new Trial Spawners that throw waves of enemies at you. Those with a keen eye for detail will be rewarded, as hidden trip-wire traps can stall progress throughout the chamber.

Challenges with randomized rewards are a tried-and-true method of getting players engaged in a game. There's a reason why titles such as Destiny and World of Warcraft, which incentivize finding rare loot, have been pillars of the gaming landscape. With Minecraft adding decorative items such as the Bolt Armor trim, new music discs, and an entirely new weapon in the hard-hitting mace, players have incentives to run through these challenging missions again and again.

Bogged Down by the Breeze

In order to get these valuable items, you'll have to make your way through plenty of enemies. And in Tricky Trials, not all of these foes will be familiar: Meet the Bogged and the Breeze. While neither of the new enemies are a challenge to defeat, they add an interesting wrinkle to Minecraft's

The Trial Spawners of the newest update throw waves of enemies at players.

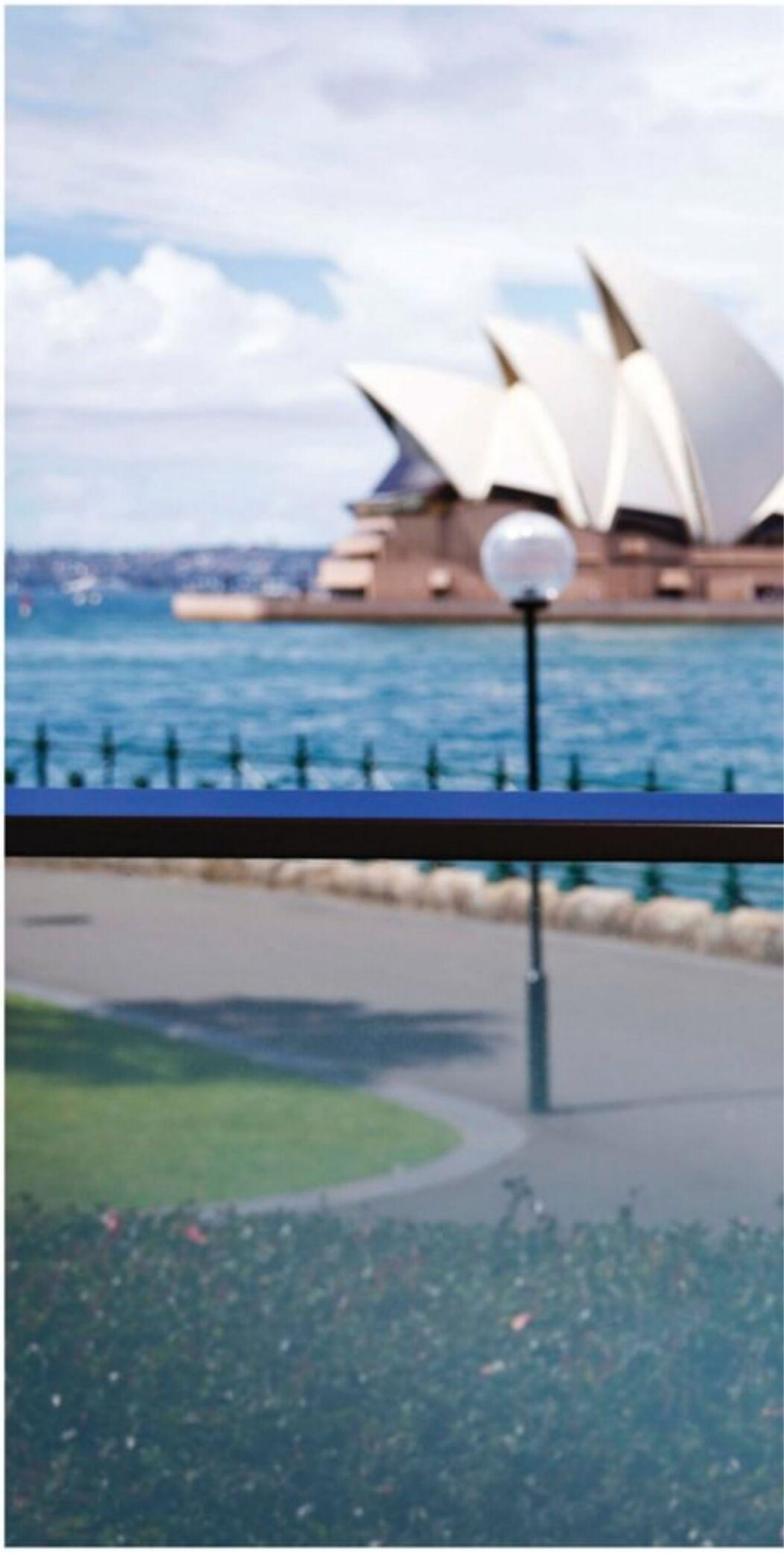
simplistic combat. The Breeze has projectiles capable of pushing the player up into the air and back, potentially causing fall damage. The Bogged, on the other hand, is a mossy skeleton capable of shooting poisonous arrows. These enemies are dangerous, and can be found in both Trial Chambers and in swamps.

The two enemies provide some cool variety to Minecraft's iconic rogues' gallery, with one injecting more spooky vibes into the game for those who like to explore at night, and the other forcing players to be alert and cautious of their surroundings.

New Riffs on the Block

New blocks are an exciting feature of every update, and this time around is no different. The most interesting of the new block structures here is the Crafter block. The Crafter essentially lets players automate the creation of any item. Before, players had to go to a crafting table and make their desired item by hand. Now, with two blocks worth of Redstone dust, five iron ingots, a dropper, and a crafting table, players can prompt useful resources like swords or bricks, to drop en masse with the press of a button.

Even cooler is the Crafter block's ability to launch items directly into storage chests if placed perpendicularly. This is no doubt a useful boon for players who want to focus less on the tedious elements of replenishing crafting needs and hurry off to new adventures.



THE GAME GOES HOLLYWOOD

After a delirious decade of development, the Minecraft movie finally seems to be a reality.

BY CHRIS NASHAWATY

IT ISN'T EXACTLY A HUSH-HUSH TRADE secret that, in Hollywood, movies often take years to come to fruition. Even so, the seemingly cursed production history of Warner Bros.' big-screen adaptation of Minecraft has been a frustrating series of fits and starts that goes back an entire decade. In fact, the project's path to the multiplex has been so long and winding that you may want to stock up on regenerative pork chops and enchanted golden carrots before reading further.

When Stockholm-based game developer Mojang Studios first rolled out its sandbox-and-survival adventure on November 18, 2011, the company instantly realized that it had a hand-over-fist blockbuster on its hands. In fact, it wouldn't take long for Minecraft to become the best-selling game of the millennium. To date, it has sold more than 300 million copies—that's 100 million more than No. 2 on that list, Grand Theft Auto V. So it was no surprise that Hollywood would soon came calling.

With a pop culture impact as massive as Minecraft's, a big-budget tentpole movie version of the game was always a matter of when, not if. After all, no one wants to leave that kind of money on the table. But that didn't mean that the path to theaters would be an easy or direct one.

As the game's creator, Markus Persson, began to field offers from the studios, he was careful not to appear too eager—or star-struck—to get in bed with the first Tinseltown suitor waving a checkbook. But it turned out the game's enthusiasts did not share his patience. In February of 2014, as Minecraft continued to rack up dizzying sales numbers, some of the game's

Jack Black portrays Steve in the upcoming movie, slated for release in April 2025.

more obsessive—and unconcerned—fans attempted to crowdfund a Minecraft fan film on Kickstarter. That caught the attention of Persson, who wasn't about to sit by and watch a massive Mojang payday vanish, so he quickly began mobilizing the company's legal team to file a cease and desist order. And later that same month Persson would reveal that Mojang had reached an agreement with Warner Bros. to develop the first official Minecraft movie.

At the time, Persson and Warners conservatively predicted that the film might not reach theaters until 2018. That estimate now looks wildly optimistic, though the studio did try to get things rolling. With one of the most powerful—and lucrative—pieces of IP now on its development slate, Warner Bros. hoped that a Minecraft movie would follow in the same money-minting toy-to-film footsteps that made the *The Lego Movie* (2014) a massive hit (and would, several years down the road, turn *Barbie* into $1.4 billion blockbuster). Or, to put it another way, they were praying that it would end up being more 2023 *Super Mario Bros.* ($1.36 billion in revenue)

than 1993 *Super Mario Bros*. ($38.9 million).

In their quest to mine the riches of Minecraft fandom, the studio would end up hiring (and firing) a revolving door of writers and directors who were tasked with turning a game with almost no discernible backstory into the kind of fleshed-out narrative that would anchor a feature film.

The first person to come aboard was Shawn Levy. When the director of this year's megahit *Deadpool & Wolverine* signed on in late 2014, he was then best known for delivering such box office successes as *Night at the Museum* and *Real Steel*. The husband-and-wife team of Kieran and Michele Mulroney (*Sherlock Holmes: A Game of Shadows*) was tapped to pen the screenplay. But after Mojang read their script and realized that the filmmakers' take on the material clashed with theirs, the Mulroneys and Levy departed. This would be the first defection from the project . . . but hardly the last.

Next to enter the director sweepstakes would be Rob McElhenney, the star of *It's Always Sunny in Philadelphia*, who had cut his teeth behind the camera on several episodes of the FX series. In July of 2015, Warner Bros. announced that McElhenney would be helming the Minecraft movie, adding that the film's budget was pegged at a hefty $150 million. Soon, *Wonder Woman* screenwriter Jason Fuchs was hired as was, reportedly, Steve Carell, who had recently wrapped his seven-season run on *The Office*. At the time, Warner Bros. was bullish enough on the project to announce a tentative release date for 2019, when the Minecraft film would duke it out at the box office with *Star Wars: Episode IX—The Rise of Skywalker* and *Avengers: Endgame*.

But again, the studio's plans would go awry. In 2016, an unexpected regime change at Warner Bros. would see the departure of production head Greg Silverman and the arrival of his replacement, Toby Emmerich. With that C-suite shake-up, every movie in development at the studio was reevaluated. With momentum halted, McElhenney and Fuchs walked away from the project in 2018. Interestingly, McElhenney would quickly go off and create, write, direct, and star in the Apple TV+ series *Mythic Quest*—a satire of the gaming industry.

By this point, Warners' Minecraft movie was beginning to look like a cursed production. Screenwriting brothers Adam and Aaron Nees (*Band of Robbers*) were quietly brought on to the project . . . and even more quietly let go. Next through the revolving door was Peter Sollett (*Nick and Norah's Infinite Playlist*) as the film's latest director and cowriter (with Allison Schroeder). Finally, the studio was convinced that it had found the perfect creative team to push the Minecraft movie over the finish line. Warners even announced that the movie would be ready for a March 2022 release. But the COVID-19 pandemic scuttled those plans. In the meantime, Sollett and Schroeder would end up going across town to Netflix to make the high school rock comedy

Opposite, clockwise from top left, Jason Momoa, Jennifer Coolidge, Danielle Brooks, and Kate McKinnon have signed on to play a part in Steve's realm.

Meanwhile, on TV . . .

Netflix is developing an animated show based on the game, possibly arriving by next year

While the big-budget Minecraft movie starring Jack Black and Jason Momoa has repeatedly taken one step forward and two steps back during the past decade, the block party appears to be going more smoothly over at Netflix with its in-the-works Minecraft animated series. Although less publicized than its feature-film sibling at Warner Bros., the show's top-secret existence was confirmed on the streaming giant's social media channels in May 2024, when it dropped a 21-second teaser (featuring a green creeper and a whole lot of lava) along with the news that the series would place brand-new characters in the pixilated world of the hit game (side by side with existing characters Steve and Alex, naturally). Netflix also confirmed that the CG-rendered series was being developed by WildBrain—the Canadian animation studio behind the Netflix titles *Sonic Prime*, *Ninjago: Dragons Rising*, and *Carmen Sandiego*.

Though no release date has been announced, the series is expected to debut some time in 2025. Minecraft will now dare to boldly go where many other games have gone, and flamed out. After all, the history of video game adaptations has, at times, been a brutally unforgiving one. For every box office success story, such as *Lara Croft: Tomb Raider* or the *Resident Evil* franchise, it often feels like there are a dozen *BloodRayne*s and *Alone in the Dark*s. However, in recent years the trend has been moving in a positive direction, and we are in the midst of a gaming-adaptation golden age, thanks to the small-screen success of Amazon's *Fallout* and HBO's award-winning *The Last of Us* and the big-screen hauls for 2023's *The Super Mario Bros. Movie* ($1.3 billion worldwide), *Pokéman: Detective Pikachu* ($450 million worldwide), *Sonic the Hedgehog 2* ($405 million), and *Five Nights at Freddy's* ($291 million). With a rabid fanbase measuring in the hundreds of millions, something tells us that Netflix's animated Minecraft series will put the "block" in blockbuster. *–C.N.*

Metal Lords. They would never come back. After a decade of detours and dead ends, Minecraft was now back where it began.

As the world horded toilet paper and Lysol wipes, Warner Bros. began headhunting for a director again. And they finally found one in Jared Hess, the indie success story who had exploded out of Sundance in 2004 with the cult sensation *Napoleon Dynamite*. Hess would turn out to be a rabbit's foot. After all, with his arrival in 2023 came a steady drumbeat of actors who would be cast in the live-action film: Jason Momoa, Kate McKinnon, Jennifer Coolidge, Danielle Brooks (*The Color Purple*), Emma Myers (*Wednesday*), Jemaine Clement (*Flight of the Conchords*), and the star of Hess's 2006 luchador comedy *Nacho Libre*, Jack Black, as the film's protagonist, Steve. Black would announce his involvement in a series of playful Instagram posts that spread like wildfire.

While little is known about the plot of the Minecraft movie, previous versions of the script focused on a group of young friends trying to save the Overworld from the Ender Dragon. But the details of the story seemed less important than the fact that cameras had finally begun rolling on the New Zealand set of the film. After a decade and change, it looked like there were no other potential hurdles (either human-made or act-of-God) that could now derail the Minecraft movie. But then, Hollywood would end up grinding to a halt during the industry's unprecedented 148-day writers' strike.

JACK BLACK ANNOUNCED HIS INVOLVEMENT WITH A SERIES OF INSTAGRAM POSTS THAT SPREAD LIKE WILDFIRE.

If you were a betting person, this would have been a good time to lay a wager that the Minecraft film would end up being scrapped for another decade. But the project would eventually resume without incident in January 2024 and wrap four months later in April. As of right now, the project is in postproduction and the Minecraft movie is slated to hit theaters on April 4, 2025. That is, if everything goes as planned . . .

More Gamer Movie Ideas

Five more unlikely video game adaptations we'd like to see

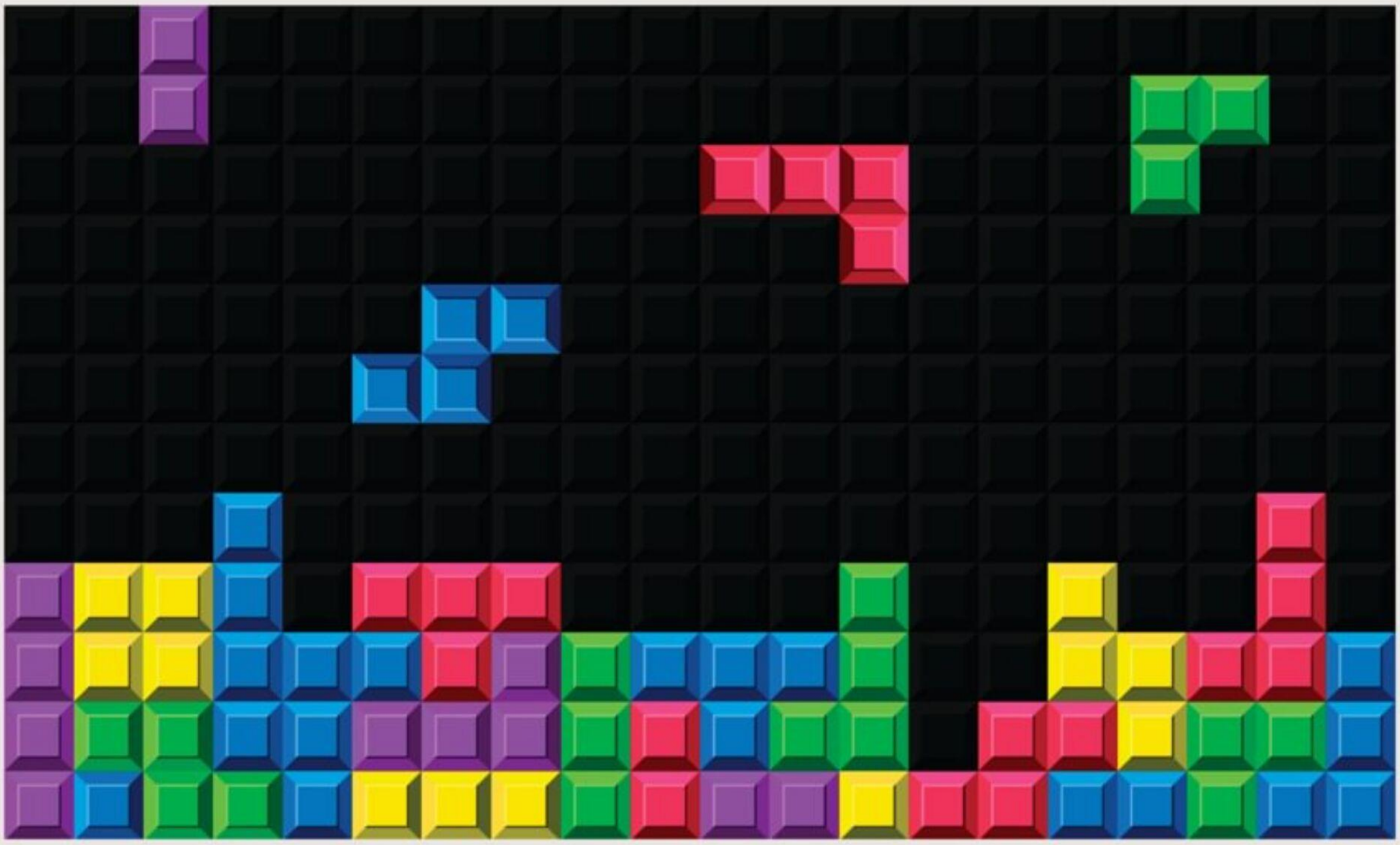
BY DARREN FRANICH

The news that Hollywood is actually making a Minecraft movie might be a cause for chortling to some. "A movie adaptation of Minecraft?" they might scoff, sipping highballs and dipping bread rolls into a carafe filled with beluga caviar. "Goodness, how silly! There's no story to Minecraft! It's just lots of blocks you use to build things!" Those people would do well to remember *The Lego Movie* of 2014, which took the whole "blocks-used-to-build-things" concept and turned it into a pretty freaking good movie. Not to mention *Barbie*, which turned a universe of 1960s-era dolls into the top-grossing movie of 2023.

So, for the moment, is it possible to be optimistic and imagine the next wave of video game cinema? Here are ideas for five more game adaptations that don't particularly seem like they could be movies—which could ironically make them perfect as movies.

Breakout

It's a tale as old as time. A paddle, a ball, bricks to be broken. For



Tetris (above) and Breakout (opposite) don't have narratives but still could be fodder for funky movie ideas.

decades, we have thrilled to new iterations both official and unofficial, which typically add in new garnishes. (Your paddle has lasers now!) But maybe it's time to put a new twist on an old story. The big-screen Breakout would pull a Wicked and alter the focus completely. A society of anthropomorphic bricks suffers a sudden and inexplicable attack from a massive space paddle, which hurls a bouncing-ball-of-destruction in what appears to be some kind of terrifying game. The bricks have to come together, led by a dashing young brick rebel (voice of Miles Teller), and reform, preparing for the next attack.

Tetris

Hollywood actually made a Tetris movie in 2023, and it was a well-regarded if relatively adult story in which the hero goes to Russia to secure the patent to the classic building-blocks game. But imagine a more fanciful movie adaptation that zeroes in on the emotional core of Tetris: It's all about fitting in, you know? I see Jay Baruchel voicing the wisecracking L-shaped block, joined by his avuncular pal Square Block (Seth Rogen), who tries to impress the too-cool-for-school T Block (Aubrey Plaza) by competing in the Ultimate Tetris Championship. But in the process, he runs afoul of the malevolent ten-time champion, Straight Line Block (Tom Hiddleston). Just imagine the Hans Zimmer version of the Tetris soundtrack!

Doctor Mario

Super Mario Bros. has been the subject of adaptations as well. The 1993 attempt was one of the worst movies ever made, while the 2023 version became a colossal hit. But here's an idea for a new take on the story that goes in a whole new—and admittedly improbable—direction. In this telling, Mario (Jon Bernthal) is a guy from the wrong side of the tracks who worked his way through med school moonlighting as a plumber. (He rarely slept, which led to elaborate maybe hallucinations about mushrooms and turtles and a beautiful princess.) Now he's working as a doctor in the most violent corner of New York City, attempting to navigate the byzantine health care system in the midst of a mysterious new epidemic. Can he prescribe the right mixture of medication? Think *Contagion* meets *A Beautiful Mind*.

Candy Crush

There's lots of candy or whatever and the candy talks or whatever. Spoiler Alert: Candy Crush is a bad game and you're a bad person for playing it.

Boom Blox

Steven Spielberg actually worked on this early Wii game, wherein you use blocks to build stuff and then knock over stuff made of blocks. So, totally similar to *Lincoln*. For the movie, Spielberg could reteam with *Minority Report* star Tom Cruise—and, more important, the *Minority Report* power gloves. Cruise plays a man who takes a job as a "beta tester" for a new game that requires him to constantly knock over gigantic block buildings. But things take a weird turn when Cruise discovers that the "game" is real, and that the "block buildings" he's been destroying are real buildings in, like, Detroit. Thrills ensue!

Dan Middleton, known online as DanTDM, is a British YouTube personality with nearly 29 million followers.

YOUTUBERS KEEP THE GAME SPICY

With more than 1.5 trillion (!) views to their credit, video stars inspire and shape players' experiences

BY TRONE DOWD

JARED BERKOMPAS STARTS HIS DAY much like any other working American. The 27-year-old rolls out of bed a little before 8 a.m. and gets dressed for the 9 to 10 hours of work ahead of him. He heads to the kitchen of his home in Royal Oak, Mich., to brew himself a hot cup of tea to soothe his throat before heading over to his laptop.

But Berkompas doesn't log into Slack or Microsoft Teams like so many others. He instead joins one of the many Minecraft worlds he's created in the last eight years. This isn't some elaborate, fun version of the metaverse that tech companies were excitedly touting a year ago. Berkompas is instead preparing for the most crucial part of his unorthodox full-time job: being a Minecraft YouTuber.

"Whatever concept that I have for that day, I'll start by setting it up, build whatever I need to build to show off whatever, and I'll jump into recording," he says. "That'll usually take me a few hours. Let's say I start at 8 a.m., I'll go until 11 a.m."

The next part of his workday doesn't sound too

dissimilar to the daily routine of a career video editor working for, say, a news organization or ad agency. Berkompas spends the afternoon and evening skimming through the hours of Minecraft gameplay he's recorded, clipping together the best parts. During his lunch break, he'll respond to comments from his 1.78 million subscribers. After all, cultivating his community is a crucial part of the job.

"When I'm done, I plan for the next day by coming up with an idea for what I want to record next," he explains. "I'll write out some bullet points. 'Remember to mention this,' or 'Here's a joke I can put in when I talk about that.'"

This is a day in the life of a content creator. Sites like YouTube and Twitch are spilling over with clips of popular video games from hobbyists, and a select few creators are lucky enough to make a living playing games by getting others to tune in. Among the games that pull in the most viewers, Mojang Studios' seminal smash hit Minecraft easily ranks as one of the most popular. Minecraft claims that videos related to the game have generated an astounding 1.5 trillion views on YouTube. This user-generated content is the lifeblood of the game experience and has been essential to keeping it feeling fresh after 15 years.

"We're proud of the Minecraft community on YouTube and the role content creators have played in supporting the franchise over the past 15 years," says Ryan Cooper, head of Minecraft Game Experience at Mojang.

Some of the biggest stars, such as LDShadowLady and Jelly, have subscribers in the tens of millions, and they can make as much as $20 million a year. But how does one even get into this nonconformist career path and make content that stands out from the crowd? According to some of the most successful players in the field right now, it's a combination of grit, patience, consistency, a willingness to grow, and a genuine love of the game.

When Minecraft 1.0 was released in 2011, it may have seemed primitive by today's standards. But it was a revelation. In an era in which open-world games like Grand Theft Auto and Fallout were already major commercial successes, this little indie game made by a single creator pushed the popular concept further in unexpected ways. This wasn't just a game where you could do anything and be anybody. It gave players the tools to make anything they put their minds to. No game had given players this kind of freedom and power to make their play session entirely theirs.

"Minecraft is endless in what it can do," says 32-year-old Dan Middleton, a veteran YouTuber. "You can do anything in the game that you want, which lends itself to videos or streaming really well. Role play, game shows, competitive tournaments, factual videos, and cartoons. The list is endless. If there's something you want to do in Minecraft, odds are someone has made something that can help you do it."

Middleton, best known as DanTDM on YouTube, was one of the earliest Minecraft creators on the platform and is widely considered the granddaddy of the genre. The Essex, England, native had already made a modest name for himself for his videos about the Pokémon trading card game, starting in 2010. But after his brother introduced him to Minecraft the following year, something clicked.

Kurt J. Mac's "Far Lands or Bust," which tracks his journeys to remote reaches of the Minecraft universe, is one of the many genres of video the game has spawned.

"I learned how to play Minecraft watching YouTube videos and thought, 'This is the perfect game for me. I've got to try making videos on this on a separate channel,'" he said, noting the game's emphasis on creativity.

Switching to Minecraft videos proved to be well worth his time. In just six months of playing Minecraft, his new channel, DanTDM, had overtaken the old one he had worked on for years. Today, he's one of the most recognizable gamers in the entire world, with nearly 29 million followers.

In a few frames, it's easy to understand Minecraft's meteoric rise. The colorful, peaceful landscapes and retro aesthetic were a major draw for kids. The game offered all of the imaginative promises of a LEGO set within the digital confines of a favorite medium. It is easy enough to learn the basics, but the game is also complex and varied enough that users can always learn more about it. And with the steady cadence of free updates expanding the game, players can feel like they are on an endless scavenger hunt to discover all of Minecraft's secrets.

Initially, the game's many mysteries attracted content creators on the front lines who were peeling back Minecraft's layers. In the early days, YouTubers helped establish the many formats that have become popular today. Minecraft Let's Play—in which a user makes a video of gameplay that usually includes commentary over it—allowed people to showcase cool feats of engineering and architecture. Content

creators also made educational videos teaching folks how to use Redstone, Minecraft's loose equivalent to electricity, to power elaborate contraptions and machines, like railways, trapdoors, and elevators.

For those who loved the game's fantasy trappings, there were creators dedicated to adventuring into unknown lands, slaying monsters and uncovering the mystery of how to confront the game's final boss, the elusive Ender Dragon. These Dungeons & Dragons–style romps gave way to the popular speedrun videos, in which creators try to reach the game's end credits in record time.

"I was learning at the same time as uploading," Middleton said of these early days. "I was able to experiment a lot and find out very quickly if something was or wasn't going to work."

For some, Minecraft became the perfect tool for creative endeavors beyond the game mechanics. Since August 2012, a month after the birth of their first child, wife and husband duo Jess and Jason Bravura have run their family-friendly YouTube channel, Aphmau. For them, Minecraft is the tool through which they tell a variety of episodic stories to their 21.4 million subscribers.

"This format works best for us because both of us are writers," Jess said. "And this gives us an outlet to put our personalities and storytelling together."

The couple discovered the potential for Minecraft from watching viral creations from the earliest YouTubers on the scene. Jess and Jason say they vividly remember looking at each other one day and saying, "Hey, we should try this!"

For two years, Aphmau was a side gig for the new parents. But in 2014, shortly after the birth of their second child, Jason's entire division at his day job was suddenly laid off.

"That's when we both realized that we had to make this work to provide for our kids," Jess said.

With a newborn at home, two months of severance, and a flood of ideas for the channel, the couple went all-in trying to crack the content creation code.

In 2013, with millions of subscribers tuning in every day, Dan Middleton turned making Minecraft videos into his full-time job.

"When I started there were hardly any creators making a full-time wage from it," Middleton said. "The technology back then was completely different too. You had to be pretty creative to give your videos a higher production quality."

Today, that's changed significantly. With access to editing and production tools readily available, creators of any size have a shot at doing this full-time. But access doesn't mean guaranteed success. There's still a grind to finding one's footing in today's crowded landscape of popular YouTubers, in the world of Minecraft and in other realms of content.

"Learning the formula was so gradual," said Jared Berkompas, who started in 2017. "I started to hone my craft in 2018. Back then, my strategy was to focus on one part of the content and iterate. I would make a specific kind of video for a while and try to say catchy, cool, fun, different things. Later on, I'd work on improving the formula by mixing in new editing tricks or background music. So it was a really slow build."

His breakthrough moment came when he figured out how to show more personality in the content. Some of Berkompas' favorite Minecraft YouTubers growing up were reserved in how they spoke to their audience. So he went in the opposite direction, creating a sort of online persona infused with his real-life curiosity for the unknown.

"I'm naturally like, 'Oh, how is this gonna work?' or 'What does this block do?'"

Berkompas said, explaining the persona of Wattles he created that allowed him to go full-time six years ago. "It's pretty much exactly me, with a small hint, a pinch of spice, so it's interesting for viewers and not dry."

For the Bravuras, who started out uploading standard segments from Let's Play in Survival Mode, the realization that viewers had an appetite for serialized stories was the key to a winning formula. They tested the waters with a video Jason called "a very small, Pokémon fan-fiction" type story, and to their surprise viewers ate it up.

"The audience just loved it to death. It was our first moment where we thought, Hey we could make this into something more than just a hobby," Jason said.

Jess used the tools they learned to bring her most ambitious project to life a year and a half later: Minecraft Diaries.

"It was this phenomenal high fantasy story where Jess was portraying the main character and interacting with other people in this world," Jason said. "And that was just another launching pad where the audience just couldn't get enough of it."

With more than 210 episodes and over 100 million viewers, Minecraft Diaries is one of Aphmau's earliest serialized successes.

Like any other business, with success comes growth. For those who reach millions of daily viewers, scaling up becomes a necessity to generating output without burning out. For the Bravuras, the channel became large enough for them to start a company dedicated to Aphmau's production.

"This started out as Jason and I working in our basement doing everything," Jess said. "But we have four kids. We have to not only do YouTube but be parents. We were like, Hey, this is taking away our valuable time we want to spend with our children."

Their Austin, Tex.–based production company employs 100 people, who help with everything from thumbnails, in-game asset creation, merchandise, and animated projects.

These days, Middleton is in a similar position. He too is a father of two young children and employs the help of a couple of editors to help him balance the expectations of his work life with much-needed family time.

"I've worked so hard when I was younger to now have the time to spend with them as they grow up, and I don't want to miss that," he said. "My editors help me a lot to save time going through hours of footage I've recorded. This definitely helps me to get more content out. I appreciate them a lot."

Jason and Jess Bravura in animation. Opposite: Jared Berkompas' Wattles avatar.

For others, like Berkompas, being a one-man operation is just fine. For him, there's still an infatuation with keeping up with Minecraft's ever-evolving universe.

"The whole game, the viewers, content being released, everything is always changing," he said. "There's always a new update that draws in new people. A year ago, for example, they did an archeology-themed update that drew in a different type of person that maybe wouldn't have been interested in watching Minecraft-related anything before that."

These modern-day internet celebrities are eternally grateful for the platforms they've managed to create for themselves. It can feel surreal.

"My favorite part is meeting people that have watched my videos, and they come up to me, saying stuff like 'You made my childhood' or 'You raised me,'" Middleton said. "This is more than a simple 'I like your videos.' There's a real connection there. Seeing how much the content you make means to people, there's no feeling like it."

"Every day we wake up and look at how far we've come from that basement, and it's just incredible," Jason Bravura said. "We are so fortunate."

Berkompas' rise came in a relatively short amount of time. But it hasn't made him jaded. He loves his job today as much as he did six years ago.

"It's always a hustle," he said. "I think that's what keeps it interesting. Because I've made more than 2,000 videos on the game and it's still as fun as it was when I was starting."

"Minecraft," Berkompas said triumphantly. "Minecraft makes all of this possible." ▯

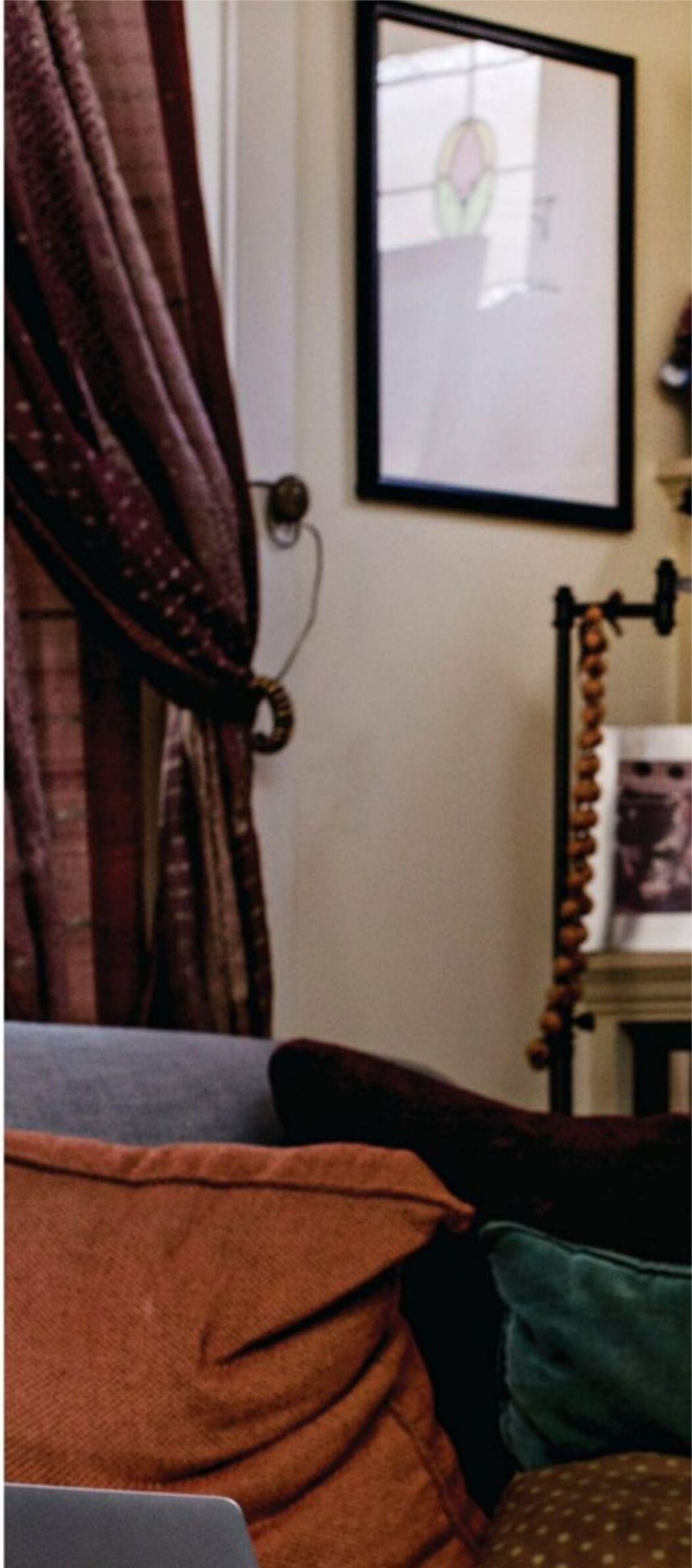
TAKING THE JOURNEY OFFLINE

Author Max Brooks has written a trilogy of books set in the Minecraft universe

BY CLARK COLLIS AND ISABELLA BIEDENHARN

NOVELIST MAX BROOKS, WHO BURST onto the literary scene with the zombie epic *World War Z* in 2006, took his fantasy writing in a different direction with a trilogy of books that take place in Minecraft. The first, *Minecraft: The Island*, came out in 2017 and was followed by the sequels *Minecraft: The Mountain* (2021) and *Minecraft: The Village* (2023). Brooks, the son of comedian Mel Brooks, told *Entertainment Weekly* that he believes writing Minecraft books is different from writing about any other video game. "We need to be very clear: I'm not writing the Minecraft book. I'm writing *a* Minecraft book," he said. "If the folks from Halo called me to write the Halo book, I could do that, but you cannot write *the* Minecraft Book . . . Minecraft is literally just a world. It's like saying, "Write the human race book."

The following was edited together from separate interviews conducted by Clark Collis and Isabella Biedenharn for the releases of Brooks's first two Minecraft books.



Max Brooks says books on topics such as Minecraft can make reading a more welcoming experience for young readers.

MINECRAFT
THE ISLAND

ENTERTAINMENT WEEKLY: Why did you start writing Minecraft books?

MAX BROOKS: For me, this is a burning passion, to write these books. I am not exaggerating when I tell you that I think Minecraft has the potential to be the greatest educational tool since Gutenberg's printing press. The education system that you and I had, it is the Prussian model of education, right? It is standardization, rote memorization, regurgitation, under a ticking clock. That was the perfect education model for the industrial revolution. But that doesn't work anymore. We're in a whole new economy—the gig economy, the digital economy, whatever you want to call it. The mental skills that young people need now in order to thrive in the 21st century are creativity, resilience, problem-solving, independence, none of which the Prussian model teaches, but Minecraft does. Minecraft teaches you that if there is a problem to solve, there are many ways to solve it, and you can come to the solution your own individual way, which is exactly what kids need in an entrepreneurial economy. When I was playing the game with my son for the first time, I realized, oh my God, this is it, this is brain training. A few years later, the folks at Minecraft reached out to me and said, "We're launching a series of Minecraft books, do you have an idea?" And I thought, oh my God, do I!

I THINK MINECRAFT HAS THE POTENTIAL TO BE THE GREATEST EDUCATIONAL TOOL SINCE GUTENBERG'S PRINTING PRESS.

—MAX BROOKS

***The Mountain* is aimed at young readers, but at times the reader can't help but be reminded that the author also wrote *World War Z*.**

There are some very tense moments. When I play Minecraft, I imagine, what if this were real? What if I were really in it? Because there are some pretty scary moments. I remember the very first time I played Minecraft, and the sun went down and the creatures came out, that was pretty scary. I had to dig a hole and hide. So, yeah, the game is not without tension, and the book should mirror the game.

What kind of feedback did you get from readers of the first book in your series, *Minecraft: The Island*?

Oh, the best feedback I could have ever gotten. I'm a kid who struggled with dyslexia, had a real problem with reading; books were my enemy until I was about 16. The best compliment that I could ever get in my whole life is to have parents come up to me and say, "My child never read a book before and suddenly picked up your book and is now reading everything." What more could I ask for?

And these are kids who picked up the book because they play Minecraft?

Yeah. And that's how reading should be taught. Most of the English teachers I had were natural readers. They cannot understand why some kids don't naturally take to books. So, instead of finding what a child's natural interest is, and then pairing them with a book, they load these kids down, myself included, with classic literature that we have no interest in to begin with. I remember when I was young, my eighth grade friend asked our teacher if he could do his book report on Stephen King, and the guy said, "No, no, no, no. That's not literature. Stephen King's not real writing. You're not allowed to read Stephen King." Well, congratulations, buddy, you've just annihilated a child's interest in reading. Young people come to the Minecraft books because they love Minecraft and they want a Minecraft adventure, which I saw as an in.

Does it feel different writing for younger readers?

You know what it is? I have to be mindful always of the game. The game is my boss and, as with all my books, I'm meticulous about my research. I'm always, in the writing process, running back to the game, wondering if I'm obeying the rules of the game. As far as a younger audience? The writing process is no different. When it comes to the marketing, sometimes I've got to be careful. There was one time with the very first book, I think I was at Comic Con in New York, some very young person asked me about the creative process. I said, "The creative process takes a lot of work, there's draft after draft." I said, "Nothing infuriates me more than when I hear other writers talk about how it just flows, as if God tapped you on the shoulder." I said, "Believe me, if you run into someone in the future and they tell you

that writing just flowed out of them, feel free to punch them in the face." And, of course, my editor grabbed the microphone and said, "Please do not punch them in the face."

When you play Minecraft, how do you play?

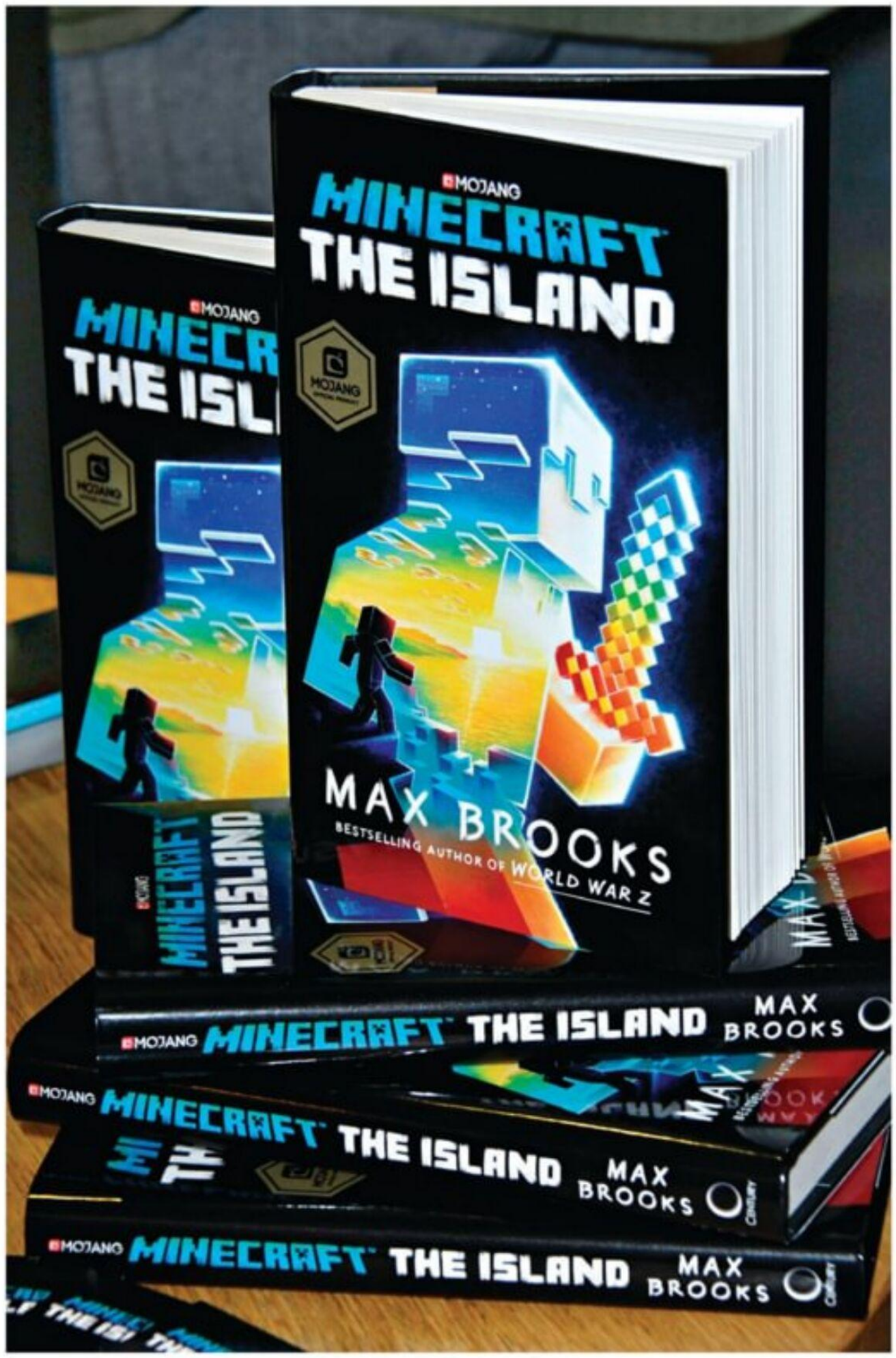
I play on something called Survival, where literally you wake up in a world. It's a natural world, and it looks no different than this world. There are different biomes, or ecosystems, like a desert or swamp or tundra, and you have to survive. From the moment that you open your eyes, just like in the real world, you're losing food. So you better find a way to eat: Either hunt animals or plant seeds and grow crops. But in order to do that, you better make tools. And to make tools, you have to get wood. And to do that, you literally have to start by breaking down a tree with your bare hands to get the wood to make the tools, to plant the seeds, to eat.

So how was it different than just sitting down to write a regular novel?

First of all, there are very specific rules of this game. I would say for every hour I spent writing the book, I had to spend, I'm not kidding, tens—if not hundreds—of hours playing and war-gaming and researching to make sure that everything I did in the book could be done in the game. And—because I'm very OCD—literally down to "How many steps can I take in a certain amount of time?" and "How fast do I lose my food when I get hungry, when I'm running as opposed to when I'm walking?" I mean, the game is that specific.

Did you do anything else to research besides playing on your own?

No, because the story [for the first book] really happened to me once when I was playing Minecraft on Hardcore. Get this: I literally, playing the game, woke up at the bottom of the ocean. I opened my eyes and locked on the sun, because I didn't know which way was up. Scary, huh? Swam like crazy for the surface—and, by the way, ran out of air within an arm's reach of the surface. And once you lose air, you start to acquire damage. So I already broke through to the surface in pain and then had to pick a location and swim for it and hope that I found land.



The Island *is the first book in Brooks's trilogy.*

Do you think everybody who plays Minecraft thinks of it in terms of life lessons? Or is this just you, as an adult and as a dad?

I have no idea. I'm the type of writer who can never try to anticipate my audience. My first book, *Zombie Survival Guide,* stayed in a drawer for a couple years, because I could have never imagined that anybody else would read a real book on how to fight something that isn't real. I thought I was the only one who thought about this. So I would love it if more people look for life lessons in Minecraft and were interested in that stuff, but right now, I have no idea. So I have to go with what appeals to me about that world. ▯

THE VIRTUES OF MINECRAFT

The game has found favor in classrooms, with parents, and in the neurodivergent community, while also becoming a tool for activists

Children played Minecraft Parkour, a mode that involves navigating obstacles, at a gaming event in London in 2015.

THE GAME THAT TEACHERS WELCOME IN THE CLASSROOM

The educational version of Minecraft has been a hit with educators and students

BY BARBARA KIMBERLY SEIGEL

SOME VIDEO GAMES ARE MOSTLY about reflexes, but Minecraft is by its nature more cerebral. It asks players not just to react to their environment but to be creative, to collaborate, and to solve problems. So it's a logical progression that Steve and friends have trekked from the Overworld into the classroom with a program now known as Minecraft Education—a version of the game that, according to Microsoft, its parent company, now is being used by millions of students in 115 countries around the world.

It's the rare case where playing a video game in class has turned out to be a good thing.

"What Minecraft Education offers is a path toward high-quality, concentrated screen time that aligns with a curriculum," says Naomi Clark, chair of the NYU Game Center, a department in the Tisch School of the Arts, at New York University. And it does so, she says, while maintaining the open-ended nature of a game where "players can sort of decide to do what they're interested in and pursue their

Melding lesson plans with a game that kids already enjoy has been a winning combination.

own goals, which is really beneficial for activating intrinsic motivation."

Clark says that connecting that intrinsic motivation to specific learning goals—whether it be recreating a landmark from a historical lesson or building molecules atom by atom—has made for a winning formula.

Allison Matthews, head of Minecraft Education at Microsoft, agrees. "That motivation is key to unlocking students' potential, closing achievement gaps, and inspiring a passion for learning, especially for students in underserved communities or neurodiverse learners," she says.

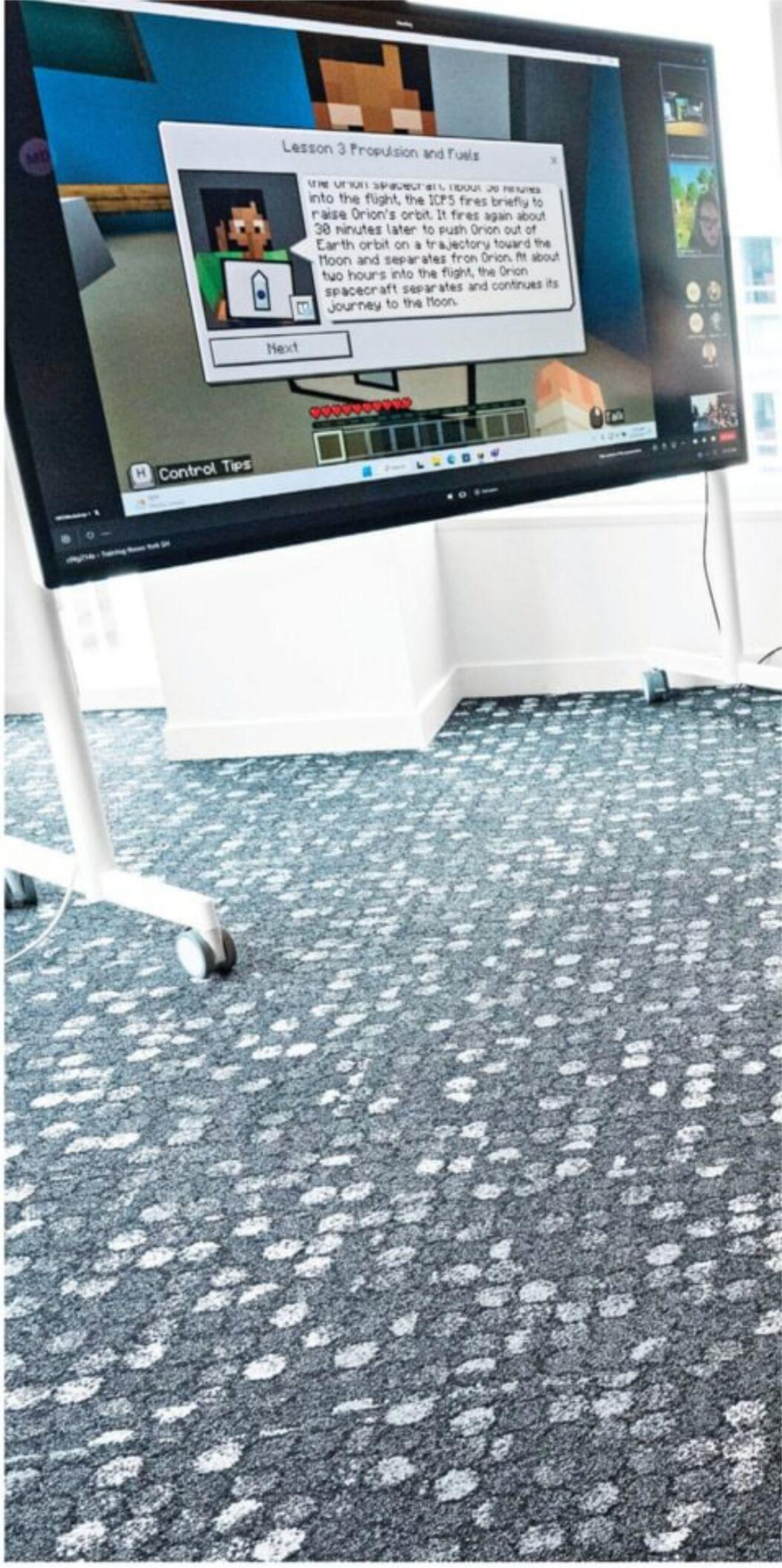
HOW IT STARTED

The open-ended nature of Minecraft's gameplay is what originally prompted Joel Levin, a New York City computer science teacher, to use Minecraft in his classroom and in 2012 to create MinecraftEdu (*see page 52*). Microsoft was impressed enough that the company, which had bought Minecraft maker Mojang in 2014, purchased the program for an undisclosed amount in 2016.

Now called Minecraft Education, the platform includes educator-created lessons across subjects, from science, math, and computer science to English, art, and ancient history. It also presents lessons that delve into emotional learning, equity and inclusion, digital citizenship, and climate and sustainability.

So how does this work in the classroom? Students using Minecraft Education still have the ability to create freely within the platform, but they can also be directed to lessons either designed by or enhanced by their instructor, or ones premade in the system. Mashfiq Ahmed, a science teacher at John Dewey High School in Brooklyn and an adviser to the school's Minecraft Club, says he uses the platform and its lessons at least once a week in his classroom.

"One of my go-to lessons is where the kids hop into a Minecraft world where they have this lab bench and table with these [element] constructors," says Ahmed. With the element constructors, students can adjust the number of atoms to produce elements such as hydrogen, helium, and other elements in the periodic table. Ahmed, who also serves as a Minecraft Education ambassador by providing professional development to other instructors, had even helped two English teachers get comfortable with the program so that they could have their students build Minecraft versions of the dystopian worlds they had been studying in literature.


Lesson 3 Propulsion and Fuels
into the flight, the ICPS fires briefly to raise Orion's orbit. It fires again about 30 minutes later to push Orion out of Earth orbit on a trajectory toward the Moon and separates from Orion. At about two hours into the flight, the Orion spacecraft separates and continues its journey to the Moon.
Next
Control Tips

Mark DeNardo, or MDN, also sees the benefits of the platform. They are the lead educator and curriculum developer for the coding club at After3, a nonprofit after-school program for kindergarten through fifth grade students that is independent of NEST+m, the kindergarten through 12th grade public school in New York City where the program takes place. "Since Minecraft is an open system, it affords both the design team at Microsoft and the individual educator to produce lessons unique to the learning capacity of the students," says DeNardo.

NASA is one of many partners with Minecraft Education. Here, students participated in a demonstration about the Artemis moon missions at the Microsoft Technology Center in Arlington, Va., in 2023.

For example, in their after-school Minecraft class for second through fifth graders (which meets weekly and is entering its second year), students were asked to design a climbing gym and a parkour course and then were able to invite their classmates to come into their worlds and take on the challenges.

STUDENT COLLABORATION

Perhaps the defining trait of Minecraft learning is that classmates can work on projects together. "The secret sauce in Minecraft success is not just that it's a little digital system that kids can build with cubes," says Clark. "It's that they can do it with their friends."

And that is exactly what prompted Ahmed to explore the Microsoft Education platform, which he first used during the 2020–21 school year, at the height of the COVID-19 pandemic, to create a Minecraft club, which was virtual then but now also meets in person. The club now takes on e-sport challenges—such as the annual Battle of the Boroughs Minecraft Challenge, which encourages student teams across NYC to virtually create inclusive and sustainable future city spaces.

"I originally created my Minecraft Club as a place for students to have social-emotional learning and

to de-stress and socialize because we were in the middle of the pandemic," says Ahmed. "What I did there originally was, I created a little survival world where they could play the regular Minecraft game within Minecraft Education."

And that they could do so in a safer way—with some of his students having no prior experience with Minecraft—is a win for parents wary about what and who their children might encounter in the online gaming world. Their games take place in a digitally walled-off space, with students using their school emails and log-ins to access the program through their school's subscription, Matthews says. The students are only able to interact with each other, and they can invite other students and educators in the same network to access their worlds.

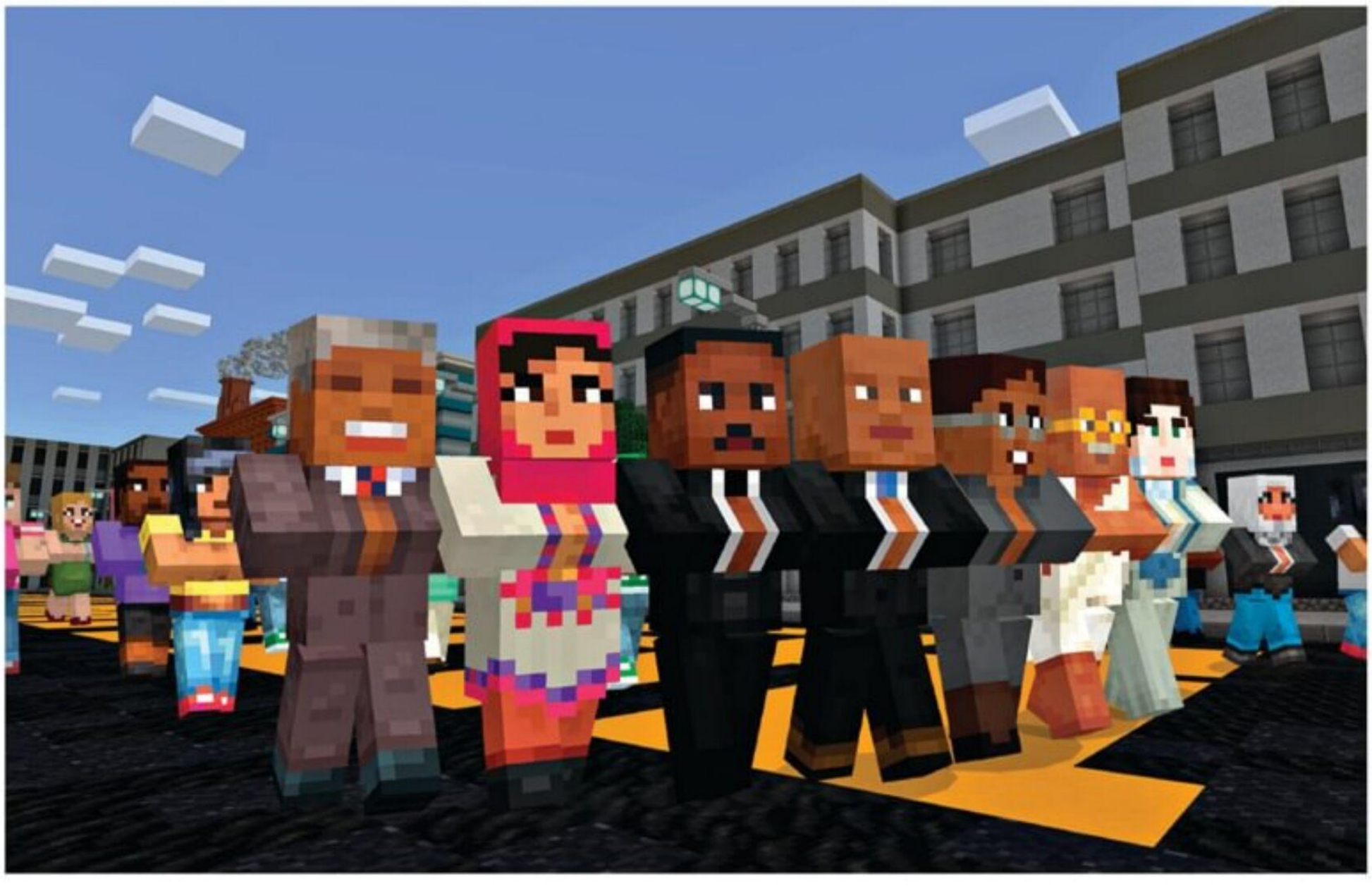
This collaboration isn't just fun; it is a skill-building tool. "Providing options on how to work together, how to create competitive play which is constructive and fun, and how to engage in independence and interdependence in a healthy manner has great benefits for the future of our society," says DeNardo. "The social benefit of working in video games is that we can show children how to foster social intelligence, critical thinking, and intelligent practices in gaming—this is up to the teacher to invent practices that lean into both play and education."

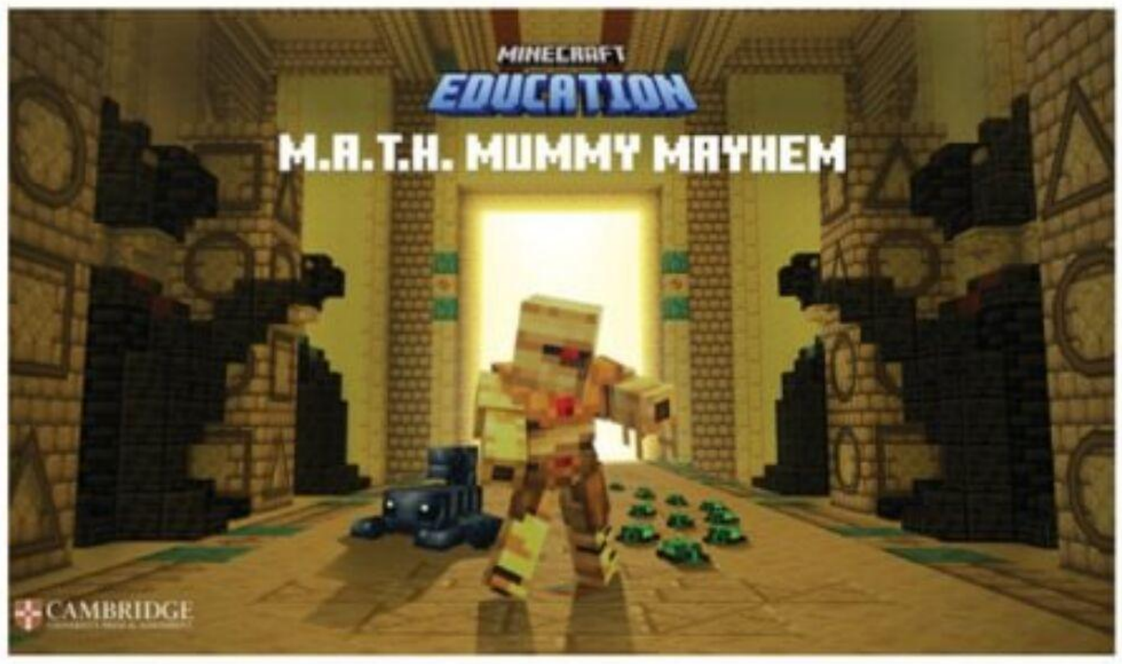
LEARNING ABOUT CODING

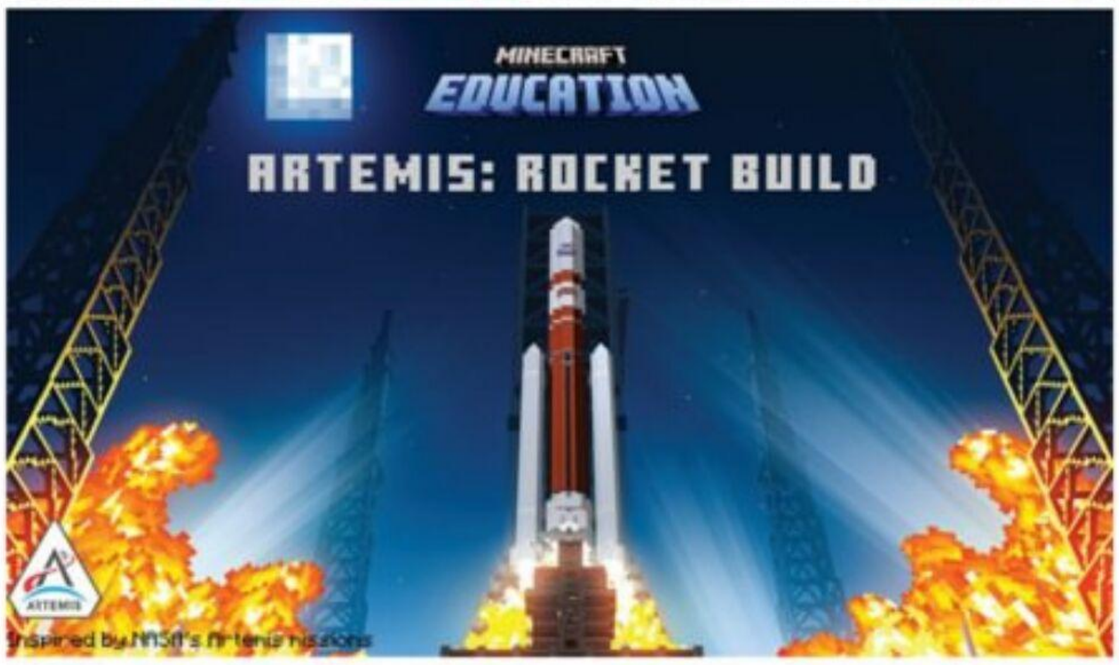
While the nature of Minecraft is familiar to many students, one addition that enhances the Education version is its ability to teach coding within the platform. "Code Builder is a feature for Minecraft Education that allows students to code inside the game," explains Matthews. "Students learn to code with MakeCode blocks, JavaScript, or Python, and see their code come to life in the blocky game world. For example, a learner could write code to build a pyramid, grow a forest, or make it rain chickens."

This program includes a small gray character called the Agent, which executes code and can be programmed to carry out actions. DeNardo explains how Code Builder allows students to input programmatic functions: "One can assign variables, loops, conditionals, functions, and other systems typical in software engineering through block-based code and the script-based code languages of Python and JavaScript."

The program offers Hour of Code, a tutorial which familiarizes students with coding basics. Its most recent iteration, Hour of Code: Generation AI, guided students to write code to solve artificial intelligence puzzles. "We have focused our efforts on building AI literacy among teachers and students—deepening their understanding of how AI works and how to use AI tools responsibly," explains







"Good Trouble" (opposite), which features late congressman John Lewis and is about the history of social justice movements, is one of the many lessons (above) available for Minecraft Education.

Matthews, adding that the AI for Earth lessons "show how AI is used to solve real-world challenges in sustainability and conservation."

AI is a relatively new part of the cultural conversation and one that some people are wary of. While it seems to be the wave of the future, Clark is skeptical of Microsoft including real-world AI applications with such prominence on the Minecraft Education platform, given that people are still debating its merits.

But the recognition of the AI wave is, if nothing else, part of Microsoft's continuing effort to keep the program current, with the company already touting tools that use AI to develop lessons for use within the platform.

Its offerings on the platform in general will likely continue to evolve, as Minecraft Education partners with such institutions as NASA, the Hispanic Heritage Foundation, BBC Earth, and others, to develop new lessons.

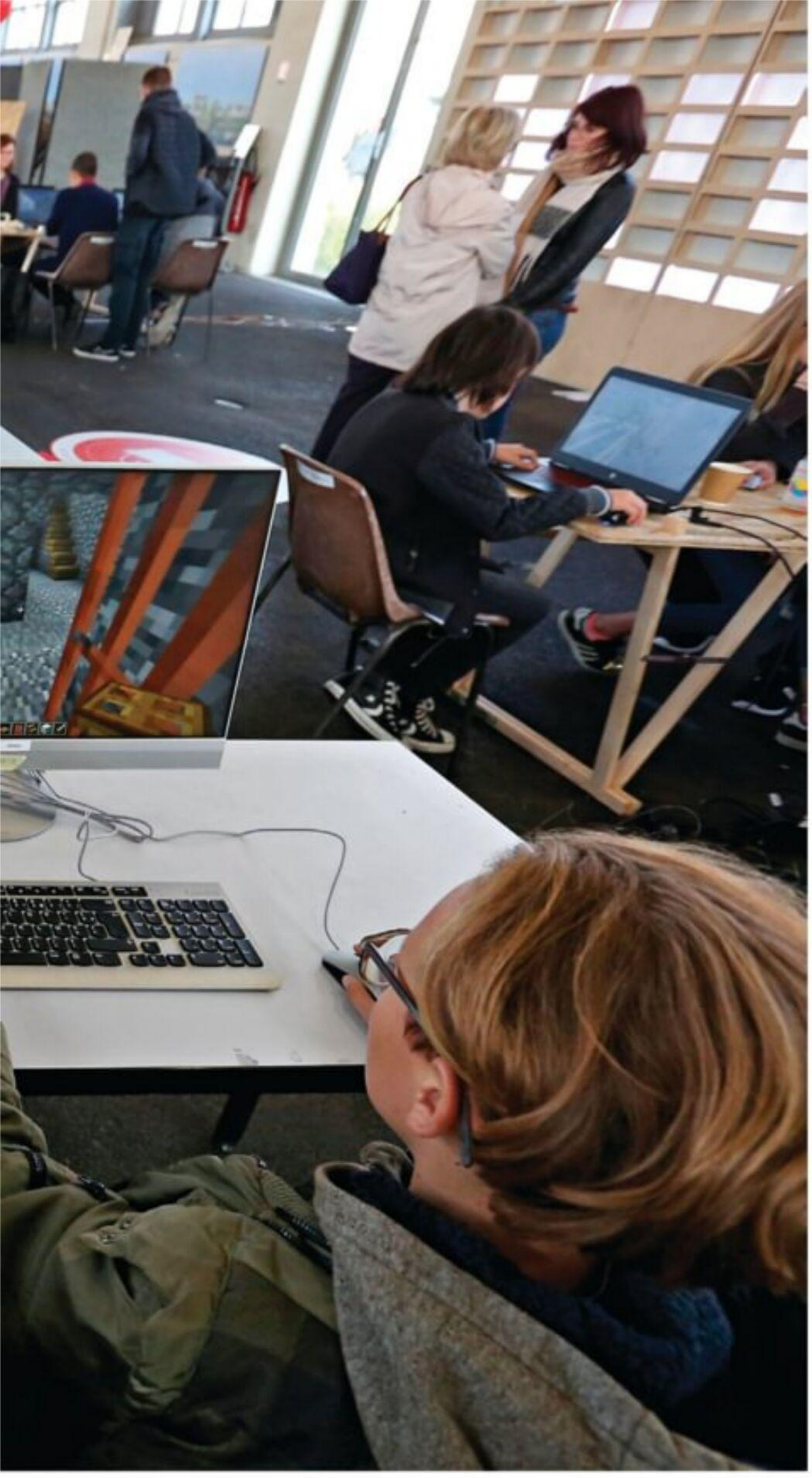
Users, of course, are able to decide how best to implement its offerings within their specific learning environments. But the basic benefits to using the platform overall are pretty constant—should the technology be in place to support it. When it comes to complaints about the game, some educators such as DeNardo (as well as those in Minecraft Education user forums) have cited compatibility problems on certain devices—and, of course, not every school district has the technological wherewithal to participate. According to Minecraft's own research, though, the technological barriers some districts face are the only real negatives they have heard from teachers.

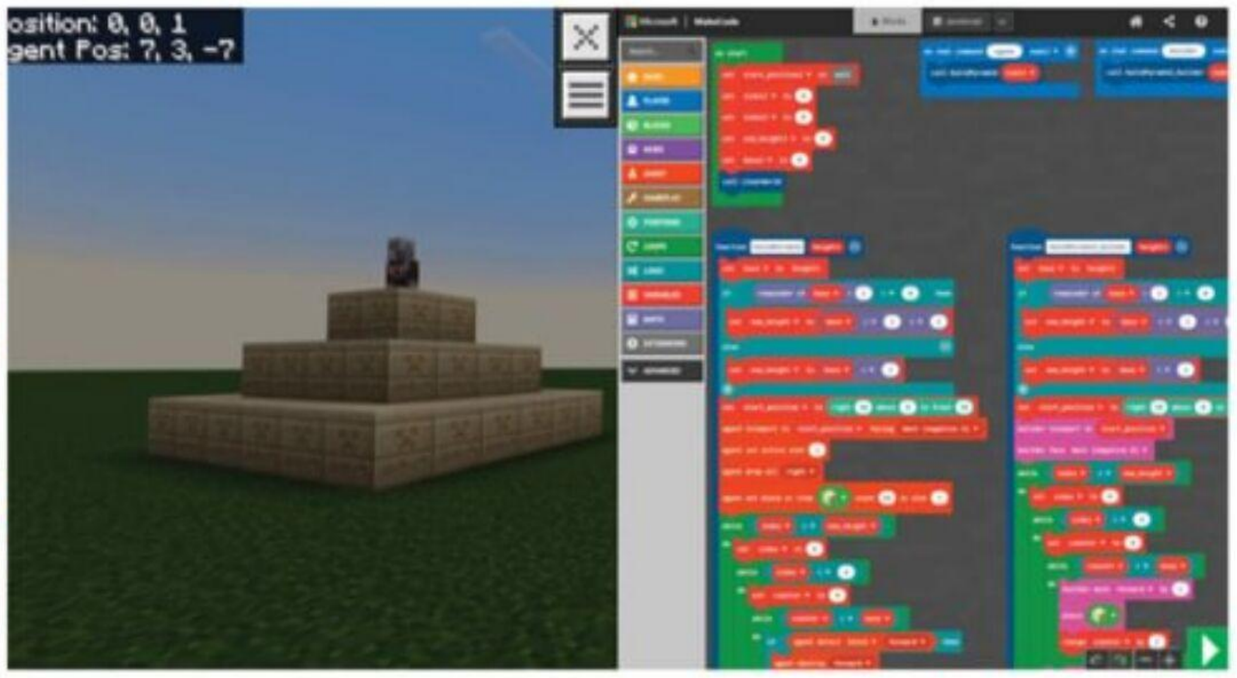
THE BROADER SCOPE OF MINECRAFT

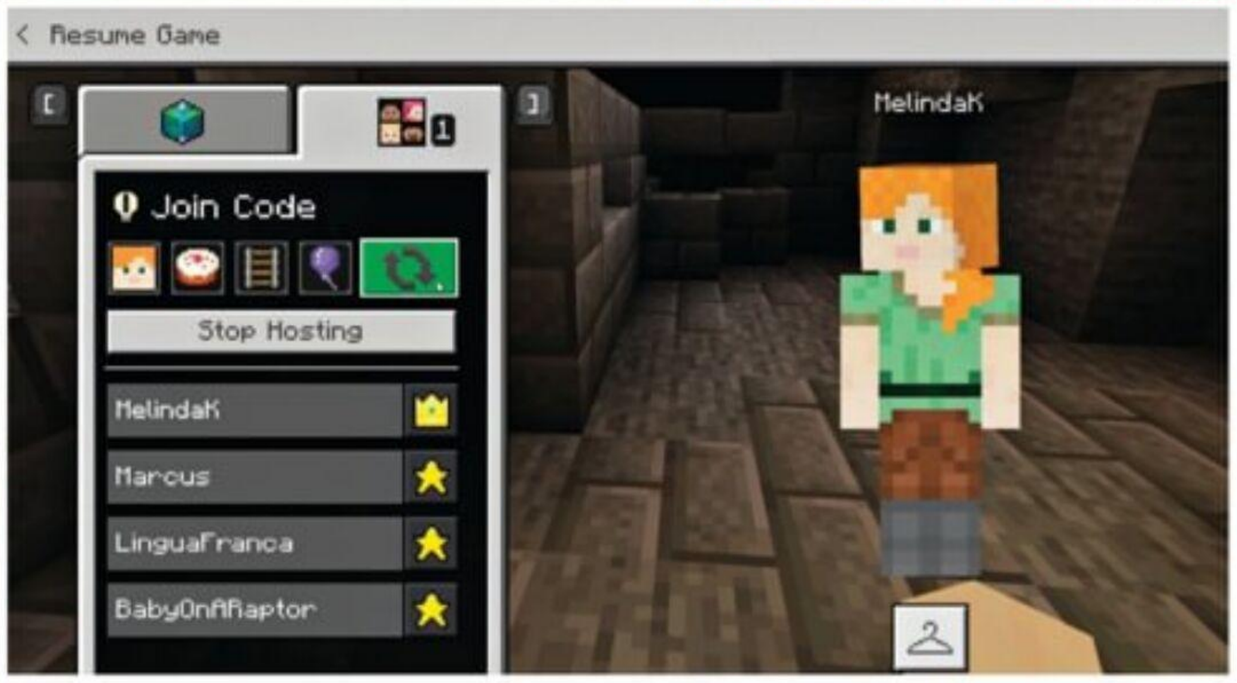
Minecraft has been used for educational purposes even before the Education edition was widely available—and not just because the game supports many of the skills that are also fostered in the Education platform. For example, Minecraft was used in 2016 by the Museum of London to create interactive renderings of the Great Fire of 1666 (before, during, and after) so players, and thus museumgoers, could immerse themselves in the experience. And in 2014, the Tate Gallery teamed up with Minecraft for Tate Worlds, which, according to the museum's site, offered players a series of maps "inspired by famous paintings and the real-life places they depict."

These initiatives demonstrate that, even without the dedicated program, Minecraft has the power to educate. Clark notes that "the original version of Minecraft already has a simple circuitry system that has always been educational for players about concepts related to electricity, logic gates, and physical computing." She adds that "Minecraft is also great for teaching basic physics, numbers, and mathematics concepts, just because it's easy to create fun environments where objects have behaviors."

In general, simply using video games purposefully can help develop critical thinking, problem solving, and spatial awareness. "When a student or anybody is playing a video game, they're making dozens of decisions within a split second about what to do, what button to press, where do I move, what should I do next and things like that," says Ahmed. And Matthews notes that "platforms like Minecraft are good at teaching digital citizenship, information literacy, and computational thinking—whether that's through immersive curricular content or collaborative gameplay."







Code Builder provides an introduction to computer coding. Left: Students in France learn about architecture.

As for those who might pooh-pooh video games and be legitimately concerned about screen time in schools, Ahmed says that his use of Minecraft Education often goes beyond the screen, with his students brainstorming their Minecraft designs using pencil and paper before building in the game. "I think so long as their screen time is meaningful, it is okay and it's fine in moderation," he explains. "A lot of students are addicted to screens nowadays, and Minecraft Education provides an opportunity to make that screen time more impactful in a way that's familiar to them."

THE BENEFITS OF PERSONALIZATION

Another asset Minecraft Education has in a classroom setting is its inclusivity. Players can create characters with skins which resemble their own. The game can be played in 29 languages. The game has an Immersive Reader tool, which, by assisting with comprehension, helps students who are learning English build up their language skills.

But beyond those details, the game is by its nature a vehicle for personal expression. Clark says, "I think that's where the potential goes beyond just STEM learning but also to creative collaboration—so when you are making something in Minecraft, you are often trying to tell a story or express yourself with it or create a little world, produce something out of your imagination." The Minecraft Education platform, continues Clark, can help students tell a story that is their own while simultaneously intersecting with topics being introduced by teachers—everything from world biomes to indigenous cultures.

And there's the simple fact that the game is fun, with many students already sold on Minecraft before it is introduced by teachers. "It's a great gateway into the subjects that we cover," says DeNardo. "It allows students to see the value of the subjects that we teach."

So when students who, when asked what they did in school today, say "Minecraft!" parents shouldn't balk. In the hands of an experienced educator, Minecraft Education can help students learn, while at the same time allowing kids to be kids. ▯

Joel Levin (opposite) started the process that resulted in modern lessons like this one about accessibility.

The Teacher Who Started It All

In this 2012 story, TIME profiled a New York City computer instructor who had crafted an educational version of the game—which would eventually become Minecraft Education

BY OLIVIA B. WAXMAN

A New York City school teacher has crafted a version of Minecraft for schools called MinecraftEdu. Given the sandbox indie game's simple premise—a pixelated world of blocks that users manipulate with tools—plus the ability to add customizable maps, educators can drop students into a world of ancient cultures, chemistry, English, and more. MinecraftEdu creator Joel Levin, who teaches second-grade computer classes

at Columbia Grammar and Preparatory School in New York City and runs a Minecraft club for high schoolers, has been incorporating Minecraft into his classes for the past two years.

About a year ago, Minecraft (owned by Mojang Studios in Stockholm, Sweden) asked him to build a version for schools so that teachers, regardless of technical skill, could set up their own server for the game. Levin added an option to turn off the monsters "so the kids wouldn't have to be worried about getting blown up," he said. In addition, the original game only allows users to add small bits of text like signs or labels; MinecraftEdu has added text blocks so that teachers can give students more context about the world they have created.

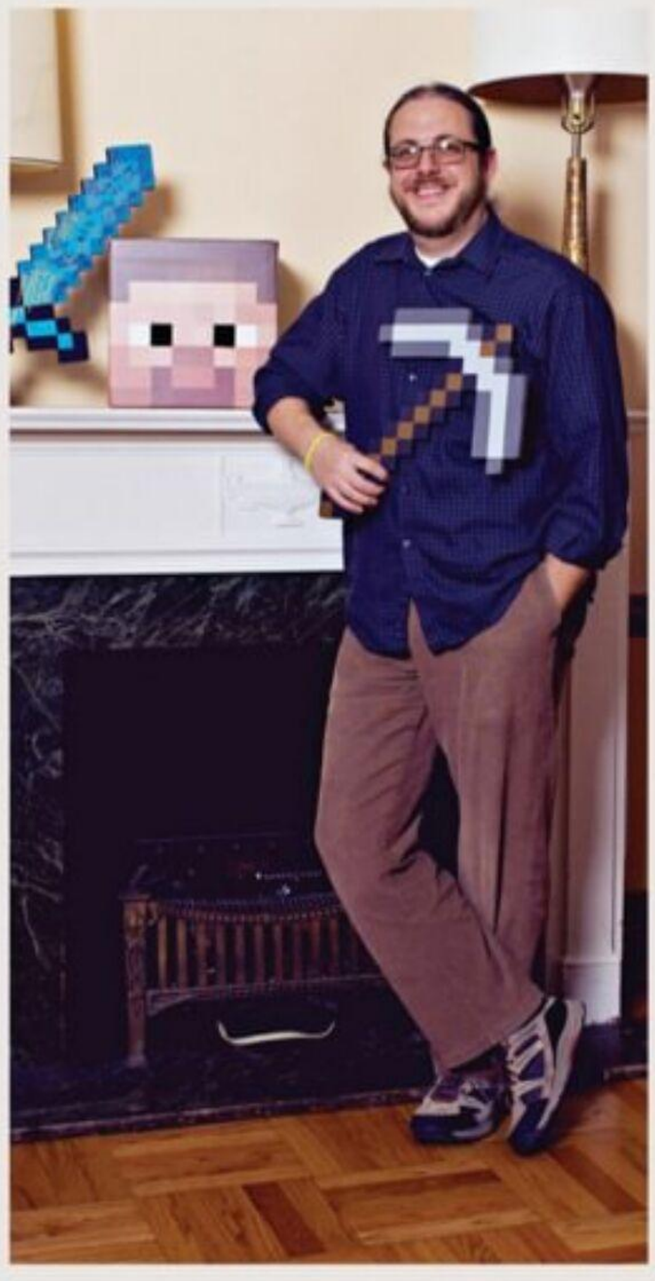
The game has not been publicly released yet and is still being tested in schools, but so far MinecraftEdu, through its Finland-based parent company TeacherGaming LLC, has sold Minecraft licenses to more than 500 schools around the world—100 of them specifically using MinecraftEdu. Levin says that roughly 250,000 students on six continents have access to Minecraft through his version.

Levin can talk a mile a minute about how the computer game can be applied to every academic discipline. English teachers "give blocks to students and say, 'Okay, you built a settlement, write the history or write the town charter,'" said Levin. Eric Walker, a teacher at the American School in Kuwait, has built a "world of humanities" that students can explore to learn about ancient civilizations and geography. Foreign language teachers simulate language immersion by asking students to write and speak the language that they are learning whenever they use MinecraftEdu.

Levin says his students are bringing up Minecraft in classes that do not even use it and building new skills along the way. "They're writing poems about Minecraft," he said. "In my Minecraft club for high schoolers, they're learning how to program on their own so that they can write their own mods. They're using their artistic skills to change the graphics. They're learning about video production so they can make their own Minecraft videos."

The idea of playing video and computer games in the classroom is not new. According to a national survey of 500 teachers who use digital games in the classroom, 32 percent said that they use them two to four times a week; 18 percent use them everyday. Seventy percent of these teachers said the games increased students' motivation and engagement levels. At a speech at TechBoston Academy in March 2011, President Obama announced, "I'm calling for investments in . . . educational software that's as compelling as the best video game. I want you guys to be stuck on a video game that's teaching you something other than just blowing something up." Levin believes that the way young students navigate the Minecraft world reveals a lot about how they navigate the Internet in general.

"If one kid breaks into another kid's Minecraft house and steals their stuff, I handle that situation as if it had happened in the real world," Levin says. "The words that we choose to say to each other in an online environment matter just as much as face-to-face. For kids growing up in 2012, surrounded by Facebook, it's very important for tech-savvy grown-ups to give them a model for good conduct and to help them navigate this world that [some] grown-ups don't understand and are afraid of."



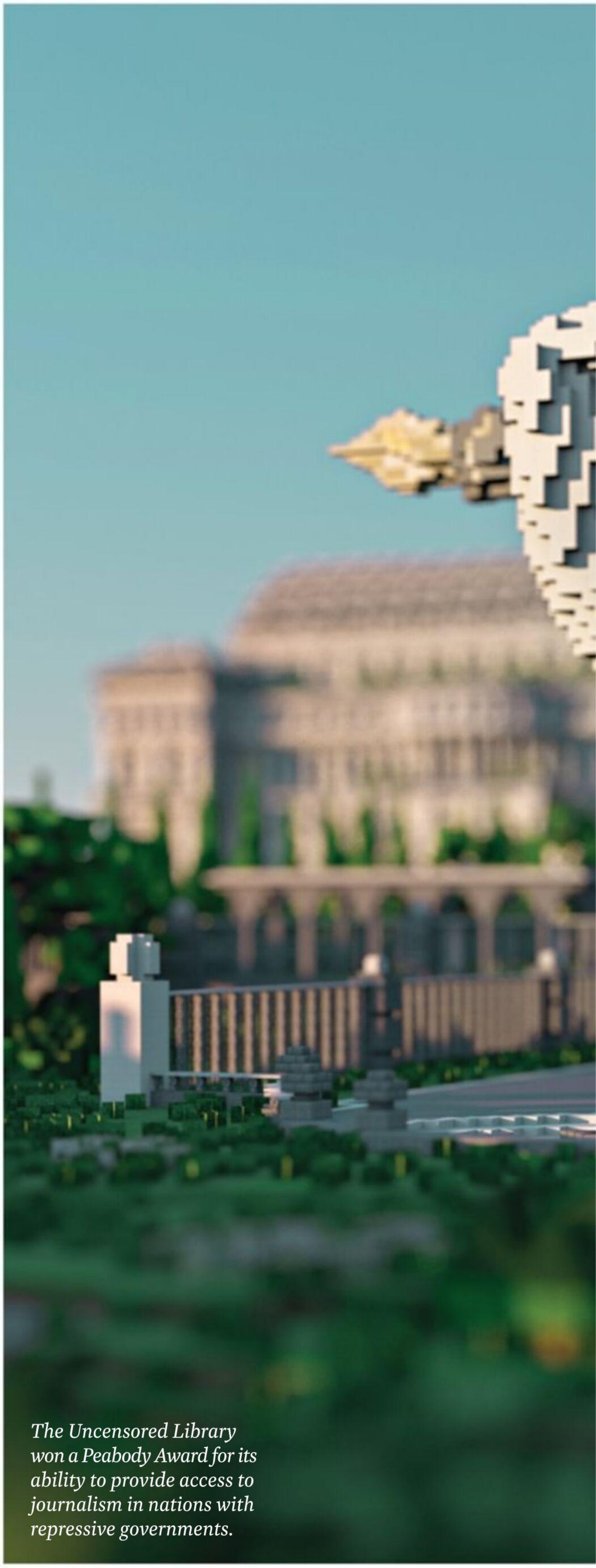
CALL IT LIBERATION TECH

The power of the game is being harnessed by people who want to change the world

BY RICHARD JEROME

AS SOCIAL MEDIA EXPLODED AND became the world's dominant form of communal discourse, the world has seen its various platforms emerge as powerful political tools—for good and for ill. During the Arab Spring of 2010 to 2012, for example, Facebook and Twitter were crucial in organizing pro-democracy uprisings against repressive regimes in Egypt, Tunisia, and Libya. Writing in *The Journal of Democracy*, sociologist Larry Diamond dubbed these media "liberation technology [which] enables citizens to report news, expose wrongdoing, express opinions, mobilize protests, monitor elections, scrutinize government, deepen participation, and expand the horizons of freedom."

Of course, social media can also be harnessed as an engine of propaganda and disinformation, as well government surveillance. The dark side of those platforms prompted scholars and activists to look for other means of "liberation tech," and video games emerged as unexpectedly fertile ground. Video games, of course, entered the culture in the



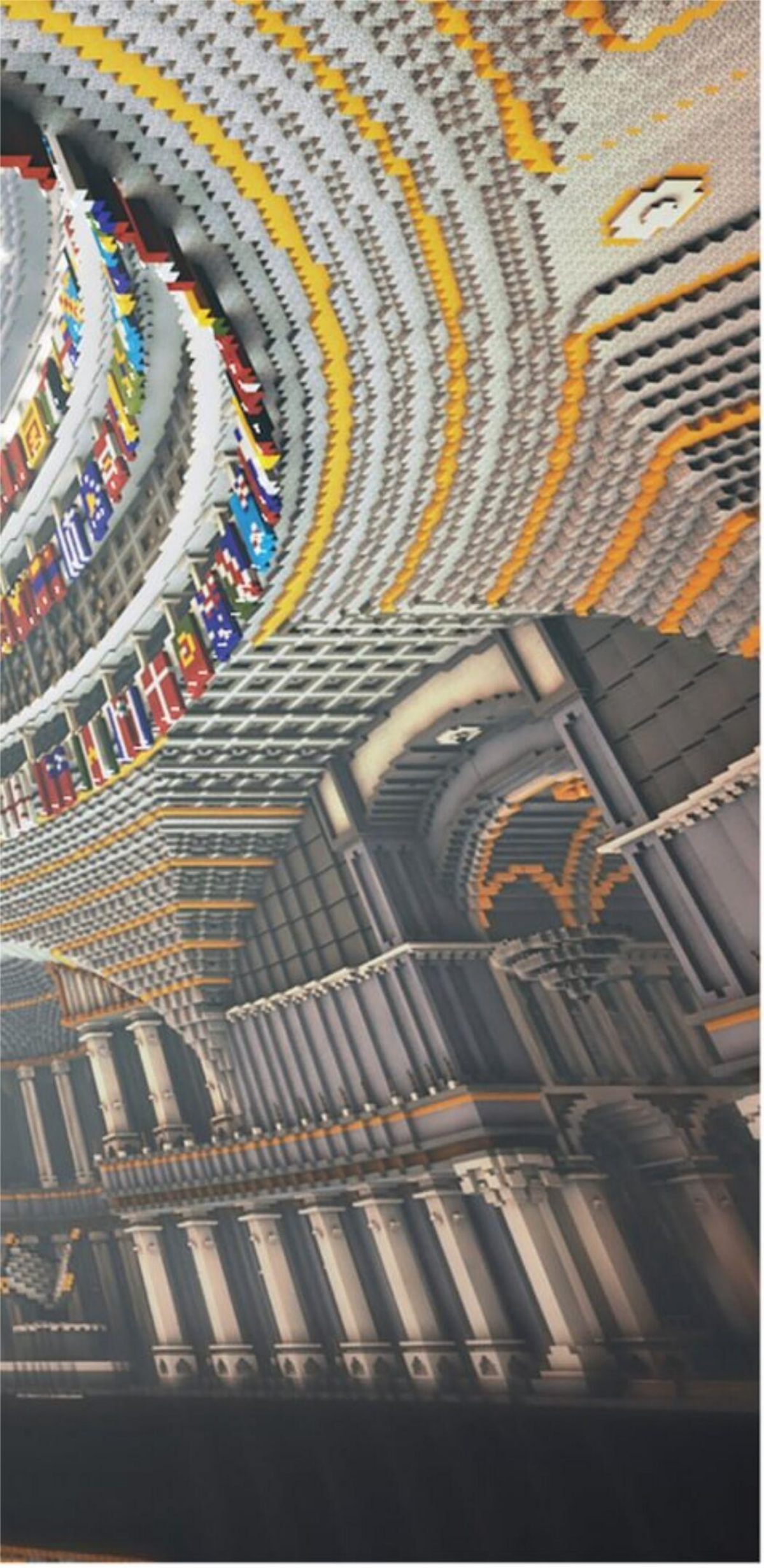
The Uncensored Library won a Peabody Award for its ability to provide access to journalism in nations with repressive governments.

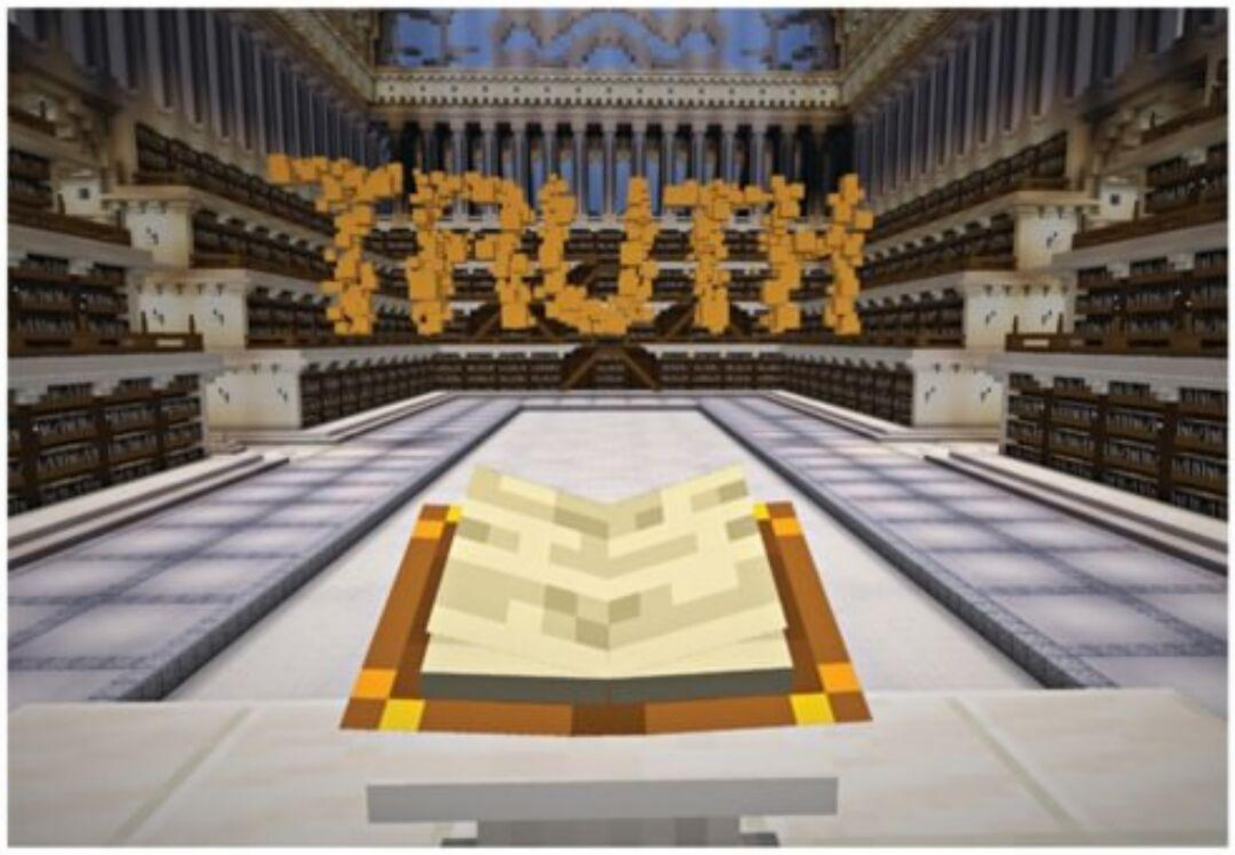
In the Uncensored Library, visitors move from room to room to find news articles arranged by country of origin.

1970s as wildly popular entertainment, played alone or among friends in arcades and family rooms. But when those games moved onto the internet, it created a secondary communications network, one in which a gamer in, say, Cincinnati, could exchange messages with one in Cape Town.

From there it wasn't much of a leap to "video game activism," which Hugh Davies of the Royal Melbourne Institute of Technology has described as "the intentional use of digital game technology to bring about social or political change." By working within the virtual reality and social media connectivity of video games, players can inspire and influence real world policies and progress—or regression.

Minecraft, perhaps, seemed an unlikely liberation technology. When the Swedish developer Mojang introduced the brand in 2009, it seemed merely an outlet for creative play. But in March 2020, the Paris-based Reporters Without Borders—the world's largest NGO specializing in the defense of media freedom, with correspondents in 130 countries—launched an innovative project within the Minecraft





universe. The organization joined forces with niche game company Blockworks, which designs custom Minecraft levels—called servers—for customers.

The result was a downloadable server with a massive library—appearing onscreen as an imposing neoclassical structure—stocked with censored literature and reportage. Dubbed the Uncensored Library, the server was built by 24 builders from 16 countries over seven months and contains 12.5 million Minecraft blocks. In 2022 the library was given a Peabody Award, with the organization calling the Uncensored Library "a monument to press freedom and an innovative back door for access to censored content."

For virtual visitors, the library has no catalog or other retrieval system; rather, users click on the country of their choice and are teleported to one of the library's rooms. "It's more of a browsing experience," Sandro Heierli, one of the project's lead designers, told *Library Journal*. "Because every room looks different, it invites you to explore a bit."

All written and audio media contained in the collection are either tightly controlled or outright forbidden in their home countries. To date, the Uncensored Library contains works from journalists in Egypt, Mexico, Russia, Saudi Arabia, Belarus, Brazil, and Vietnam. Each of those nations has its own dedicated room in the building (The librarians are working to acquire material from North Korea, Hungary, and Myanmar, among other nations with repressive regimes). "In many countries around the world, there is no free access to information. Websites are blocked, independent newspapers are banned, and the press is controlled by the state," said Christian Mihr, who was managing director of Reporters Without Borders Germany when the project was launched. "Young people grow up without being able to form their own opinions. By using Minecraft, the world's most popular computer game as a medium, we give them access to independent information."

Authors of the library's content are in many cases the victims of severe government repression and harsh punishment. One of the most notorious examples is Jamal Khashoggi, the Saudi *Washington Post* columnist who was an outspoken critic of Saudi crown prince Mohammad bin Salman and a fierce defender of imprisoned fellow journalists. On October 2, 2018, Khashoggi visited the Saudi consulate

in Istanbul to obtain some marriage documents. Instead, he was killed and dismembered by government agents, and while bin Salman denied ordering the murder he later claimed political responsibility.

Other notable writers in the Uncensored Library include Nguyen Van Dai, a Vietnamese human rights lawyer, democracy activist, and blogger sentenced to 20 years' confinement for "conducting propaganda against the state" (though he was released after two months and shipped to Germany); and Javier Valdez, founder of the weekly paper *Riodoce*, which investigates and reports on crime, corruption, and drug cartels in the Mexican state of Sinaloa. In May 2017 Valdez was shot a dozen times and killed on the street near his office in Culiacan. As the library's website notes, 10 other Mexican journalists were assassinated in 2019 alone.

Along with text, either in the author's original language or translated into English, the library features elaborate block-art installations to represent each nation's ideals of truth and freedom of the press. Wander into the Vietnamese wing and you'll encounter the Labyrinth of Truth, which displays an enormous maze, highlighting that nation's censorship and "growing effort to make access to the truth as hard as possible." In Vietnam, independent information comes from bloggers and citizen journalists like Dai, who often suffer extreme persecution. In Brazil's central hall a giant hammer hangs from the ceiling over a small book, a metaphor of the nation's repressive press laws. In the Russian pavilion you can find Data Kraken, an image of the mythical sea monster with tentacles sprawled over a floor covered in binary numbers, a representation of Vladimir Putin's stranglehold of the internet.

Putin's war against Ukraine has inspired another political foray into the fantastical world of Minecraft—a game called Minesalt. In early 2023, Russian forces captured and ultimately leveled the town of Soledar; in the process Putin's army damaged and shut down one of Ukraine's crown jewels, the cavernous Soledar salt mine—one of the largest in Europe, with 125 miles of tunnels. A tourist attraction as well as an active mine, the state-run facility boasts chambers 100 feet high, one of them more than 300 feet long, and has hosted soccer matches and classical music concerts. The starkly beautiful mine offered sleeping accommodations for visitors and even a small chapel adorned with religious paintings.

The mine's seizure was more than an economic calamity for Ukraine—it was an emotional gut punch. And it inspired United24, the official fundraising arm of the Ukrainian government, to come up with a novel plan. Plagued by donor fatigue, Kyiv instructed United24 to collaborate with Minecraft in a project to exhaustively map the mine and build a game around it. The result is Minesalt, in which players race through the mine and gather 140 hidden salt crystals. At the end of the run, a quiz tests participants' recollection of Soledar's serpentine tunnels and corridors. Players vie for prizes—anything from Twitch gift cards to bags of salt from the mine autographed by President Volodymyr Zelensky. Make a donation of $24 or more at the end of the game, and you'll enter a raffle for a chance to win more prizes. Funds go to rebuilding the Velykokostromska school in Dnipro Oblast, which was destroyed by a Russian missile in October 2022. "Now, as the city is under temporary occupation, Minesalt is the only way to explore the incredible beauty of these salt mines and commemorate the historical and monumental elements of this place," said United24 coordinator Yaroslava Gres. "We hope that as many people as possible around the world will go through Minesalt and fall in love with the Soledar mines as we have."

Of course, Minecraft is essentially about building something new and expanding boundaries, a trait which was central to the first big civic-minded Minecraft venture—the Block by Block program, a collaboration with U.N. Habitat through which members

Above and opposite: Minesalt, a game set in the salt mines of Soledar, was created by the Ukrainian government's fundraising arm as a creative way to solicit money from fatigued donors.

of a community—from elementary school kids to senior citizens—receive training and then form teams that use Minecraft servers to reimagine and redesign challenged districts and public spaces. The various plans are submitted to officials and architects for consideration. Inaugurated in 2012, Block by Block is modeled after Mina Kvarter (My Block) an initiative that allowed Swedish youths to create their ideal neighborhood through Minecraft.

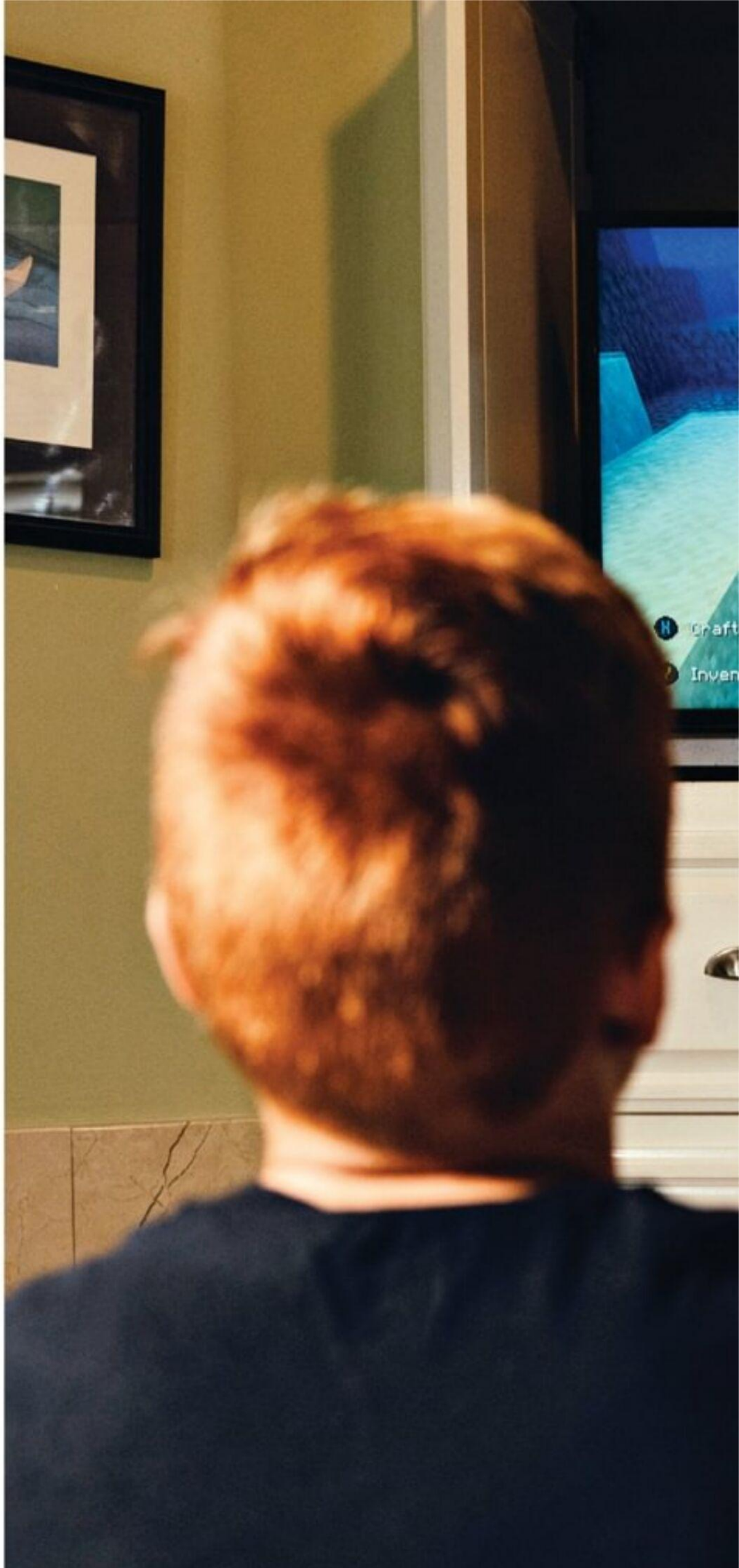
Block by Block has launched projects in 55 countries. Examples include the rebuilding of a playground and garden in Mumbai; a park and playground in Niamey, Niger; and, in impoverished and war-weary Pristina, Kosovo, transforming a dilapidated marketplace into a public space with gardens, comfortable resting benches, a playground, and Kosovo's first skate park. "I came up with the skate park idea and some trees surrounding the park," said 12-year-old Lian Loxha. "Something I worked on is being made in real life!"

The excited response of one of the project's youngest participants reflects Minecraft technology at its most successful—when a virtual creation can help address a real-world need.

YOUR CHILD PLAYS MINECRAFT. A LOT. SHOULD YOU WORRY?

As a rule, no. But there are ways to make sure their experience is a good one

BY STEPHEN DUETZMANN



I HAVE BEEN HELPING PARENTS CONNECT with their kids through games for a decade through my website Engaged Family Gaming, and Minecraft is one of my most common recommendations. I like it because of its approachable graphics, its simple and repetitive gameplay, and because for nonparticipating parents it can still be fun to watch.

And this game has become an ingrained part of the youth experience. With Minecraft hitting its 15th anniversary this year, an entire generation has now grown up knowing how many trees you need to punch to make a crafting table. Kids discover Minecraft every day through friends, YouTube videos, and even lunch boxes. The game is all around them. With a staggering 141 million monthly players and more than 300 million copies sold, it is one of the most popular games in the world.

And from a parenting perspective, I believe that is a good thing. Here's why.

RT Mine
Drop

THE POSITIVES

Minecraft is full of opportunities for education and enrichment for our kids. Every aspect of the game, from its building block design to its open-ended gameplay, lends itself to helping our kids learn and grow. It's benign enough that the game can be used in classrooms—do a Google search for "Minecraft lesson plans," and you'll see that the learning opportunities are as varied as they are endless. In fact, educators have embraced Minecraft in math, history, and coding classrooms. Minecraft Education Edition is specifically designed for classroom use (*see page 44*). It's the sort of thing that would never happen with, say, Grand Theft Auto.

But you don't need to get into lesson plans to reap the value of Minecraft, because children have much to gain in the standard gameplay. Consider, for example, the social aspects. In its collaborative form, kids develop online social communication skills—which can be valuable as they transition to work environments that are increasingly virtual. And it gives them an easy way to both stay in contact with friends when they are outside of school and also expand their social circles by making new friends from across the country or around the globe.

Another benefit to Minecraft is that children find comfort in it. One reason is that the game is built around predictable rules. Days are always the same length. Materials will always appear at the same depths. And crafting recipes are always the same. The result is a platform where players can learn about exploration, experimentation, and creative problem-solving in a way that doesn't cause stress or excess tension. While playing in Survival Mode—where mobs and other forces pose a threat—can be more tense than the benign Creative Mode—kids still enjoy the game because it feels familiar and follows patterns.

And while the base building blocks in Minecraft are all the same shape and size, kids can use them to create anything they can imagine. So Minecraft becomes a place where kids can learn to express themselves creatively, learn from mistakes (everyone struggles with connecting walls in a 3-D space at first), and collaborate artistically with others.

The freedom that kids can find while playing Minecraft is unmatched. The unbounded nature of the game's landscape lets them just play together in this digital space the same way they would on a real-world playground. This is especially a boon for kids who live in locations where they don't enjoy the freedom to wander.

EVEN IF IT'S JUST HAVING REGULAR CONVERSATIONS, ACTIVELY PARTICIPATE IN YOUR CHILD'S EXPERIENCE.

HOW TO BE SMART ABOUT IT

Because Minecraft lives online, it comes with the same risks as just about any other online experience—namely, the exposure to unsavory content and the potential for having it take over a person's life. Here are strategies for avoiding pitfalls while reaping rewards.

Screen Time: It can be tough to judge when a fascination with a video game goes too far—as is the case with other forms of entertainment. After all, how many nongamers happily sacrifice entire weekends to a binge-worthy Netflix show or to a slate of "big games" in the sports world. It isn't uncommon for people to dedicate a lot of time to the things they love, especially if it helps them relax. Video games are similar in that respect.

That said, if parents are concerned, there are a couple of steps to take.

One is to set time limits. You are perfectly within your rights as a parent to cap the amount of time a child spends on Minecraft or any video game. The key to doing this is to be clear and consistent. It will be much easier for your child to follow rules they understand.

The other is to ask them to take regular breaks to walk around and stretch–something that is also recommended for adults who spend their work days in front of screens doing things that are not nearly as fun.

You can also promote balance by encouraging your child to engage in activities that are related to the game but that pull them away from screens. Minecraft adventure books can fill a child's reading time—for example, the book series by Max Brooks (*see page 38*). You could do arts and crafts projects related to the game, such as using Perler beads to recreate Steve or Creepers. Papercraft and origami patterns abound on the internet for Minecraft mobs. Be creative—there are plenty of ways to translate a love for Minecraft into offline activities.

Minecraft books are one of the many ways you can pivot interest in the game toward offline activities.

Inappropriate Content: One aspect of this or any online experience that is a challenge to mitigate is exposure to inappropriate content. In Minecraft, the most likely source of trouble that your child will run into is crude chat messages or off-color screen names. Recently that risk has even begun to include exposure to extremist views, as hate groups have been actively recruiting in online games.

These problems are tough to solve entirely, but there are ways to manage the risks. One is to use tools that restrict content. Minecraft and most other online games have parental controls built in. Find them and use them to limit access to things like multiplayer games and realms. You can also limit who can communicate with your kids. In Xbox, for example, you can restrict interaction to Xbox friends only, or block all communication entirely.

The other thing to do is to talk regularly to your children about what they see and hear when they play the game. You want them to feel comfortable coming to you when they experience something that troubles them. Be careful not to overreact when they tell you what they have seen, though. A strong reaction in the moment might make them hesitate to share with you again.

In fact, this leads into my strongest suggestion for parents of Minecraft kids—you need to share this experience with them.

That doesn't mean you need to start spending hours studying your Minecraft strategies. But it does mean that you should show a genuine interest in what they are doing. Watch them play. Ask them questions. Listen to their stories. This will allow you to take on the role of student and let your child be the teacher. Remember to make it a habit to discuss what happened during your child's Minecraft sessions. Talk about the challenges they faced, their achievements during the session, and any problems or conflicts they encountered with other players. This gives them the opportunity to share their accomplishments and allows you the opportunity to address any potential issues promptly.

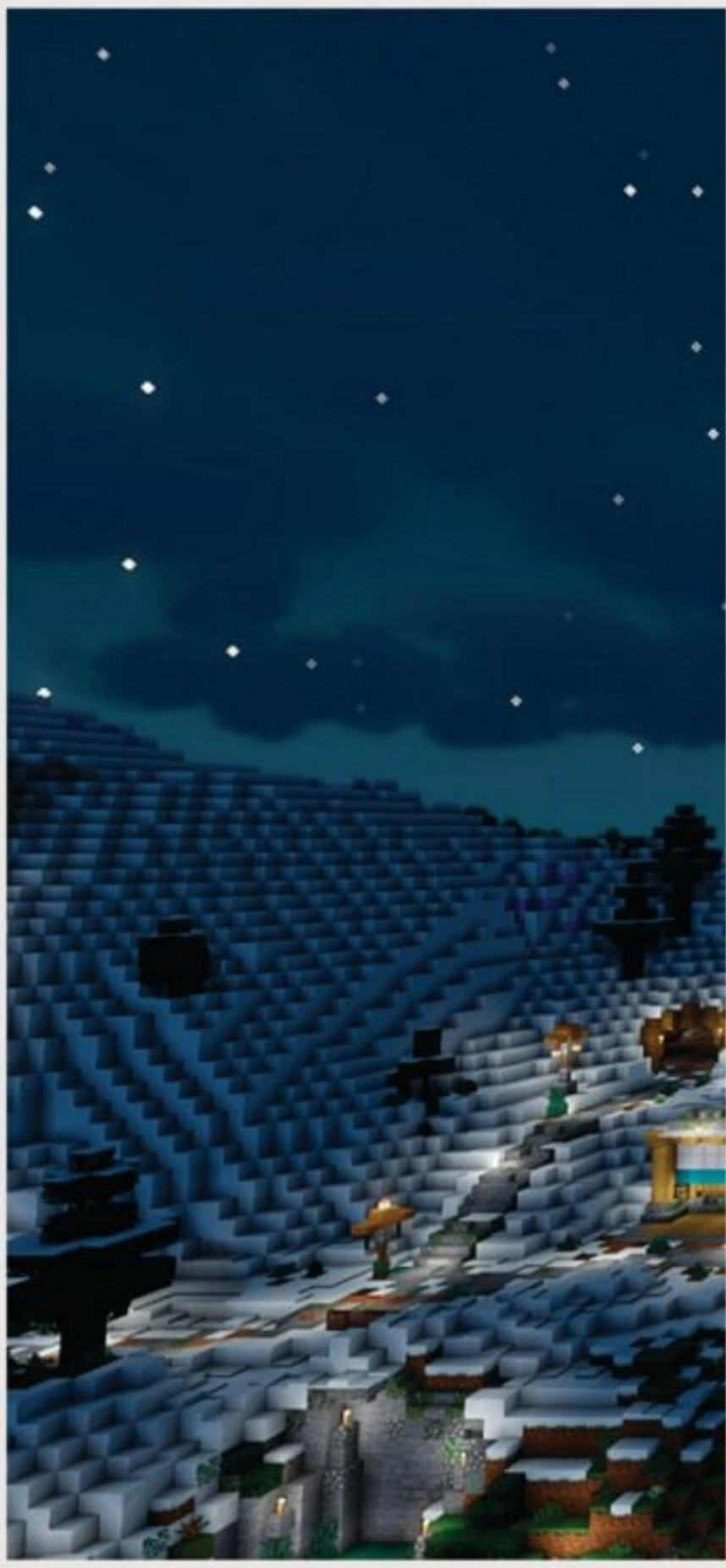
You could go one step further and play the game yourself and create a server, so all members of your family can play together and do group construction projects.

If that's too much for you, that's understandable. You don't have to build a replica of the Golden Gate Bridge with your child to be a good parent. But even if it's just having regular conversations, actively participate in the gaming experience and use Minecraft as a tool to build healthy bonds with your child. ▯

Neurodivergence and Minecraft

The game turns out to be perfectly suited for this community

BY STEPHEN DUETZMANN



Stuart Duncan, who goes by "AutismFather" online, saw a problem in 2013. He saw children with autism finding Minecraft and falling in love with the game, but then suffering online at the hands of bullies. He saw these children being called "broken." He saw them being told to harm themselves because no one wanted them. He wanted to make sure that his son, who was then a tween, and his friends would have a safe place to play.

And so, he created AutCraft, a Minecraft server tailored for children with autism and their families. The goal was to provide a safe space where autistic children could enjoy Minecraft without fear. He started the process by implementing a "whitelist" of names to prevent anyone from joining without his approval. It turned out there was a demand for a safe space like this, greater than he had imagined.

A private Facebook post led to 750 email requests in 48 hours. Not wanting to turn anyone away, Duncan rushed to upgrade his hosting and systems several times. Autcraft became a thriving community, and the whitelist now includes more than 8,000 players from across the globe.

Duncan says, "Almost all of our players have felt alone or misunderstood or afraid or hated or something, at some point, and so they all 'get it,' when someone else says that they feel that way too."

AutCraft was created with the goal of safety, and it has become a place of growth. Some parents have told him that their children have developed literacy skills and improved their social interactions. Some have told him that nonverbal children have started speaking.

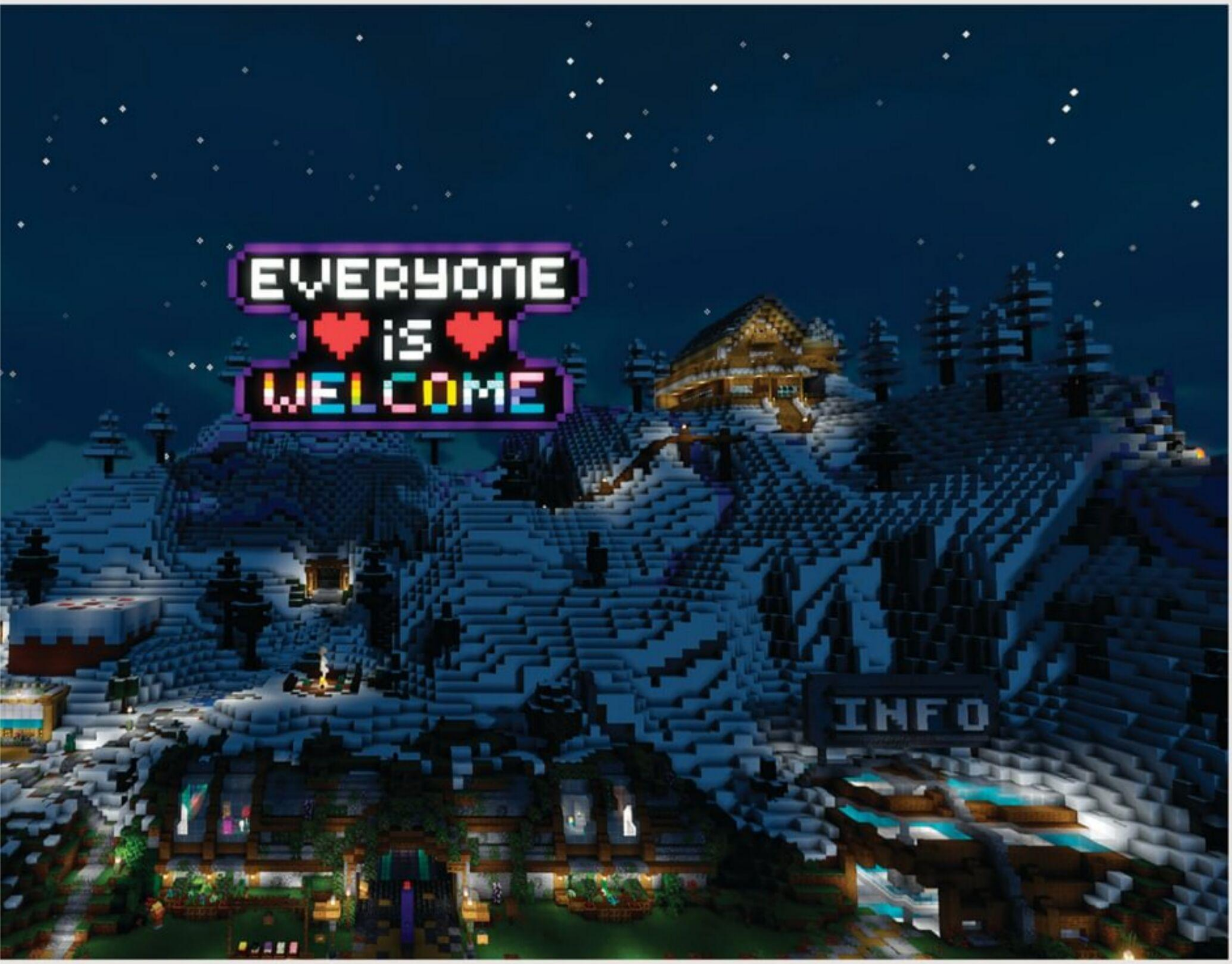
Duncan ensured that the environment stayed positive by centering the Autcraft philosophy around positive reinforcement rather than competition. Autcraft rewards kindness and helpfulness with awards called CBAs (caught being awesome) that include points that can be spent on a special digital store for the server. Moderators award CBAs during a live weekly show and make a point to talk about the specific event or behaviors that prompted each one. Duncan hopes this positive reinforcement will encourage the behaviors in his sever and beyond.

Duncan, who worked as a web developer before leaving his job to run Autcraft full time, also takes steps to make the game more accessible for his players. For example, he noticed that a player with vision issues was using dashes to make chat more readable, and Duncan developed a plug-in to help make chat more legible for them. He then expanded that to be a feature for the whole server. He goes out of his way to make sure people feel welcome.

Duncan reflects on his journey with Autcraft, saying, "I've seen so many young autistic players make such incredible progress. And that means everything. That is the greatest reward. I see it every day." For him "Autcraft means everything to me because it means everything to so many people."

The game has long been popular with players who are neurodivergent, whether they are playing in AutCraft or another setting. According to Dr. Rachel Kowert, an author and research psychologist, Minecraft is attractive because "it is creative and social, but still has structure. There are only so many blocks and there are only so many ways you can arrange them. It's also nonlinear; you can explore and create what you want, when you want."

That analysis was affirmed by several young players who are either neurodivergent or have an autism diagnosis. When asked what they liked about Minecraft, the most common answer from these children was the freedom of play. "Minecraft offers you a direction you can go, but it doesn't force you to go in that direction and you can do whatever you want, which is different than school," says Gavin, age 13.



This screen greets new members when they join the AutCraft server, which began in 2013 as a haven for neurodivergent players.

"You can just decide you want to get every combination of armor or make a giant build or try to beat the game."

For children who may find everyday interactions stressful, it can be a positive experience to escape in a game that is light on judgment. While Minecraft does have an end that can be reached, it is an optional pursuit. Children can choose to play thousands of hours in the same world, immersing themselves in a universe where there is not a driving pressure to do anything well. "The beauty of Minecraft is that there really isn't any winning or losing,' says Ben Greller, 14. "There isn't much pressure in the game; it helps me to relax." By its nature, Minecraft can go a long way in helping someone who is stressed out from overthinking.

Another appeal of Minecraft is the opportunities for customization—of both the character you embody and the world you inhabit. It gives neurodivergent individuals a forum to express themselves in ways that may be difficult in real life. The reward systems built into video games are a source of positive reinforcement. These rewards might not mean anything in the "real world," but the sense of accomplishment can help lift spirits.

And perhaps most important, the game is a place to make social connections. Meeting new people in a shared environment can reduce feelings of isolation. Even children who choose to play on their own can still enjoy a feeing of connection in the massive online Minecraft communities in which players share strategies and celebrate fandom.

Gavin's mom, Maria, says that her favorite parts of Minecraft are the servers Gavin has found beyond AutCraft that are also filled with people who are kind and supportive and help him stay motivated to achieve his Minecraft-related goals.

Children with autism need to learn social skills and the ability to self-regulate as they mature. And playing in a supportive, harassment-free environment can help make that a reality.

Spellrune is a mod that brings more magic to Minecraft. For more magnificent mods, see page 82.

3

LET'S PLAY

It's time to get down to fun and games, from the right way to get started to the funkiest mods to a look at the most impressive builds of the Minecraft community

It's a big world out there, but establish a good base before you get to exploring.

GETTING OFF ON THE RIGHT FOOT

Here's the best way to get your Minecraft journey started

BY JARED NEWMAN

MUCH OF MINECRAFT'S FUN COMES from exploring, building and discovering things on your own. It's like a set of LEGOs, except Minecraft only provides the most rudimentary guidelines. To help out with your first day in Minecraft's pixelated wilderness, here are some steps to follow. You should be able to get all the essentials done before the sun goes down and the monsters come out. Of course, you don't have to follow these instructions right away. Spend some time running around, figuring out the controls and dying a few times. When you're ready to get serious about crafting and building, here some guidelines to consider:

1. Chop Some Wood, Kill Some Animals

Wood is the ingredient from which everything else in Minecraft stems. You can use it to build tools, doors, ladders, and the all-important crafting bench, which lets you build even more elaborate

things. It never hurts to have too much, so find at least a few trees and chop 'em down with your bare hands. While you're scavenging, keep an eye out for pigs, chickens, and cows. When you kill them, there's a chance they'll drop some delicious meat, which you can use to heal yourself and stay nourished. You can also pick up apples from fallen trees.

2. Establish a Base of Operations

Don't venture too far. Find a place near your starting point where you can build some shelter. Ideally, you'll be near a stone wall, around which you can build a little mud hut to keep yourself safe from monsters. (Don't worry about enemies just yet.)

3. Craft a Bench, a Box, and Some Tools

Break down your wood into wooden planks through the inventory menu (press E if playing the PC version). Use those planks to make a crafting table and a storage chest, and place them at your base. Finally, turn some of your planks into wooden sticks, and build yourself a few wooden swords and pickaxes. (You can also build hoes, shovels, and axes, but these aren't essential for basic mining.)

4. Explore Some More, Find Cobblestone and Coal

Another essential ingredient in Minecraft is stone, which can be broken down into cobblestone. Look for smooth, grey blocks along walls, and break them down with your pickaxe. Dig deep enough, and you may also find black-specked stone containing coal. Combine the coal with a stick to create torches that can be attached to walls.

5. Close Off Your Shelter

Return to your base, and build yourself a rudimentary hut. The best way is to dig some dirt from the ground, then reposition it in walls and a ceiling around your crafting bench. If you have torches, stick one or two on the wall to light the room. Leave a small (1 by 2) opening in the shelter, and craft yourself a door out of wood planks for safe and easy access.

6. Build a Furnace, Grill Some Meat

Back at your base, use some stone to build a furnace. If you gathered any meat, you can cook it in the furnace by combining the raw meat with coal, and waiting for it to heat up. Cooked meat heals you more, and in the case of chicken, eliminates the risk of food poisoning.

7. Meet the Mob

By now, night may be falling. Venturing outside means confronting nasty creatures, including spiders, skeletons, and the dreaded Creepers. There's no serious penalty for dying in Minecraft—you'll just drop your items and return to the starting point—so if you're up for a fight, head into the night. You might want to store most of your belongings in a crate for safekeeping before leaving the confines of your base.

Make sure to store your belongings before heading out and taking on the creatures of the night.

8. Contemplate the Ramifications of Deforestation, Resource Harvesting, Violence, and Animal Slaughter to Further Humanity's Survival (Optional)

9. Go Forth and Explore

There's lots more to do in the world of Minecraft. You can venture underground for precious minerals, build a gate to the Nether, or complete the game's achievements in pursuit of the ending. You can seek out deserts and oceans or explore the seas. With enough resources, you can build castles, cities or monuments. Once you're comfortable, don't be afraid to visit some multiplayer servers to see what other people are working on. Consult the Minecraft Wiki when in doubt, and let your imagination wander. There's no real winning or losing in Minecraft, but you'll know you're doing it right when hours have passed without your realizing it. ☐

A CREATOR'S PARADISE

These builds demonstrate that what you can make in Minecraft is limited only by your imagination

BY MATT PATCHUK AND BILL SYKEN

MATTUPOLIS

This creation looks like the real world because that's what it is—sort of. Mattupolis is in fact a mashup of Vancouver, Seattle (see the Space Needle), and other locales in the Pacific Northwest. The name of this hybrid city comes from the online handle of its creator, MattuFIN, whose vision statement on the Planet Minecraft website states that he wants "at least one Tim Hortons/Starbucks per block." As fantasies go, this one is highly relatable.

WESTEROS

Game of Thrones debuted the same year as Minecraft 1.0, and both exploded in popularity across the 2010s. So it feels inevitable that the HBO show would inspire a massive group build. The results are impressive: You could do an entire picture book in tribute to what the community known as WesterosCraft has wrought.

STARRY NIGHT *(Left)*
This Vincent van Gogh masterpiece was replicated two years ago by ChrisDaCow—who in the video documenting its creation, eats baguettes and wears a hat resembling one the artist donned. ChrisDaCow's rendering is in three dimensions, so unlike the original version that hangs in the Museum of Modern Art, this is a landscape you can move around in. ChrisDaCow called on a friend with coding skills to help get the colors just right.

THE SHIRE *(Below)*
This image of Bag End, the home of Bilbo and Frodo Baggins, is part of a project by ArdaCraft that aims to recreate all of J.R.R. Tolkien's Middle-earth, one painstaking block at a time. Some of the works recreate battle sites in staggering detail, but this representation of the Shire captures the simple charm of the world the Fellowship strives to defend.

THE BILLIONAIRE'S HOUSE

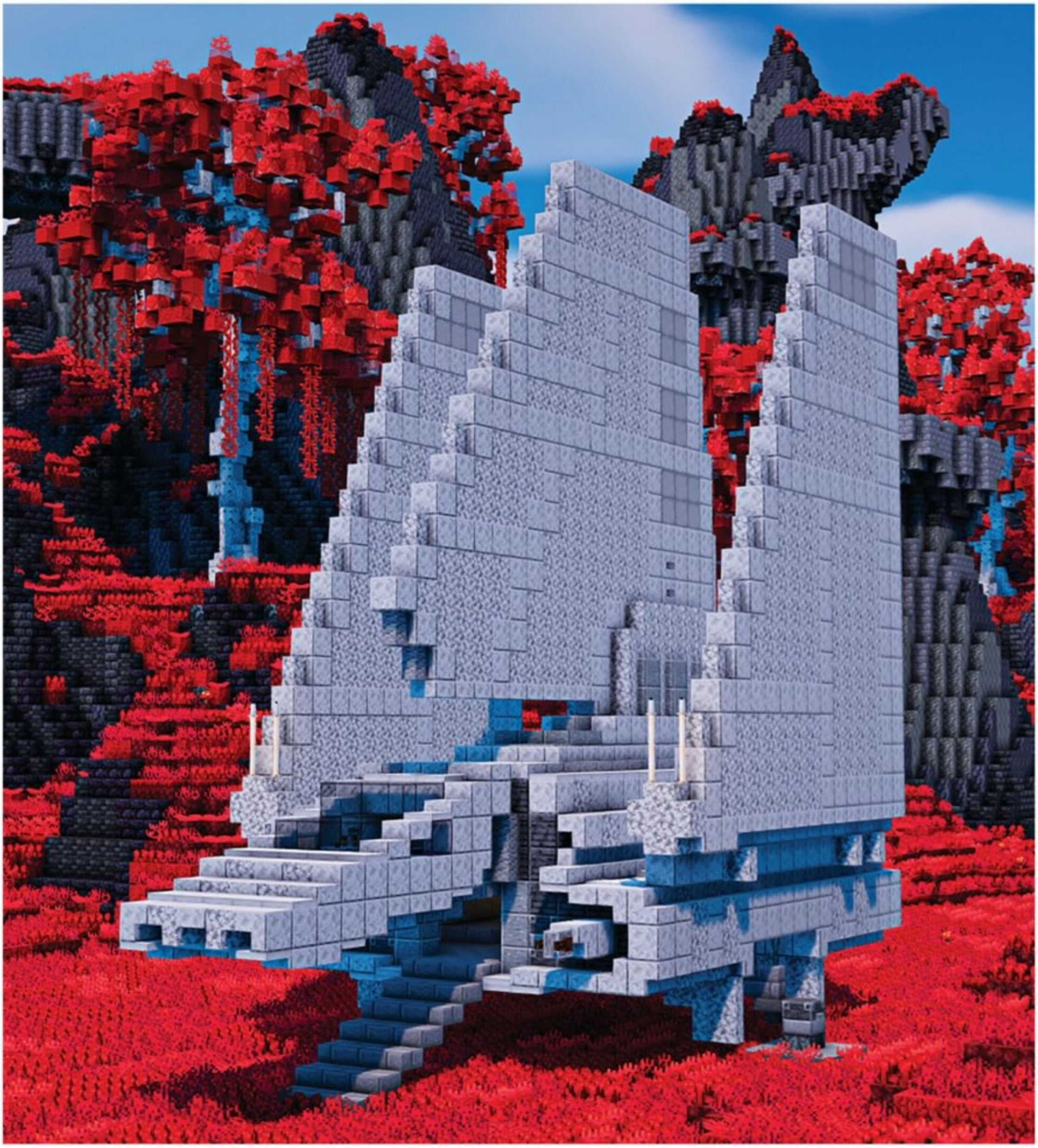
Just as in everyday life, home construction in Minecraft can be quite exotic. This structure is one of many elaborate builds by Kaizen87 that are available for download to subscribers. Even though this creation is more "realistic" than, say, Westeros or Middle-earth, it represents another kind of fantasy world—one which involves having so much money you can afford to live in a house like this.

CLOUD HAVEN *(Top)*
The backstory of this build is a variation on the story of Noah's Ark, except in this case a storm has destroyed most of Earth and what is left are ships that mine antigravity material. In this rendering by Lynchyinc, 500 years after the storm, this ship has evolved into a floating city and trading post.

CYBERPUNK PROJECT *(Bottom)*
This dystopian city of the future was inspired by the video game Cyberpunk 2077. For a time lapse video of its 2019 creation, complete with ominous yet propulsive music playing in the background, visit the YouTube channel Elysium Fire.

STAR WARS IMPERIAL SHUTTLE

TomOnMars specializes in to-scale renderings of aircraft and the other vehicles that zoom about the Star Wars universe. He keeps some goodies behind a paywall on Patreon but has some free tutorials on how to copy his work—*Millennium Falcon*, anyone?—available on YouTube.



THE WIDE WORLD OF MODS

Whether you want to chase Pokémon characters or party all night in Miami, these add-ons make your Minecraft dreams come true

BY BILL SYKEN

THE UNENHANCED, OR VANILLA, VERsion of Minecraft can provide boundless hours of fascination, but many players also like to juice up the game with downloads known as mods. Some mods are optimization tools, such as Lithium and Sodium, that make the game play faster and improve the graphics, while other mods refine the user interface. Then there are others—heavily represented here—which bring entirely new elements to the Minecraft universe. What follows is something between a best-of list and a potpurri sampler, providing a sense of the many ways this game can adapt and grow.

BLOOM

Farming is a fundamental aspect of Minecraft, but this mod brings the focus to growing plants for enjoyment rather than survival. The gardening in this game, much like its counterpart in real life, is about the quiet pleasures of tending to plants. The main object of the game is to create a garden that you enjoy, but you can also gain access to rarer plants

Dwarven Mining Company brings a fantasy adventure story into Minecraft.

by cleaning clutter, and if you grow one of every kind of plant, you gain access to a Final Forest.

PIXELMON

Two cultural phenomena come together as Pokémon characters bring their winning ways to the world of Minecraft. In this game you can capture, train, and battle characters from the Pokémon universe. It's a combination that many can't get enough of. If you want to join a Pixelmon server, you will have dozens from which to choose.

ICE AND FIRE: DRAGONS

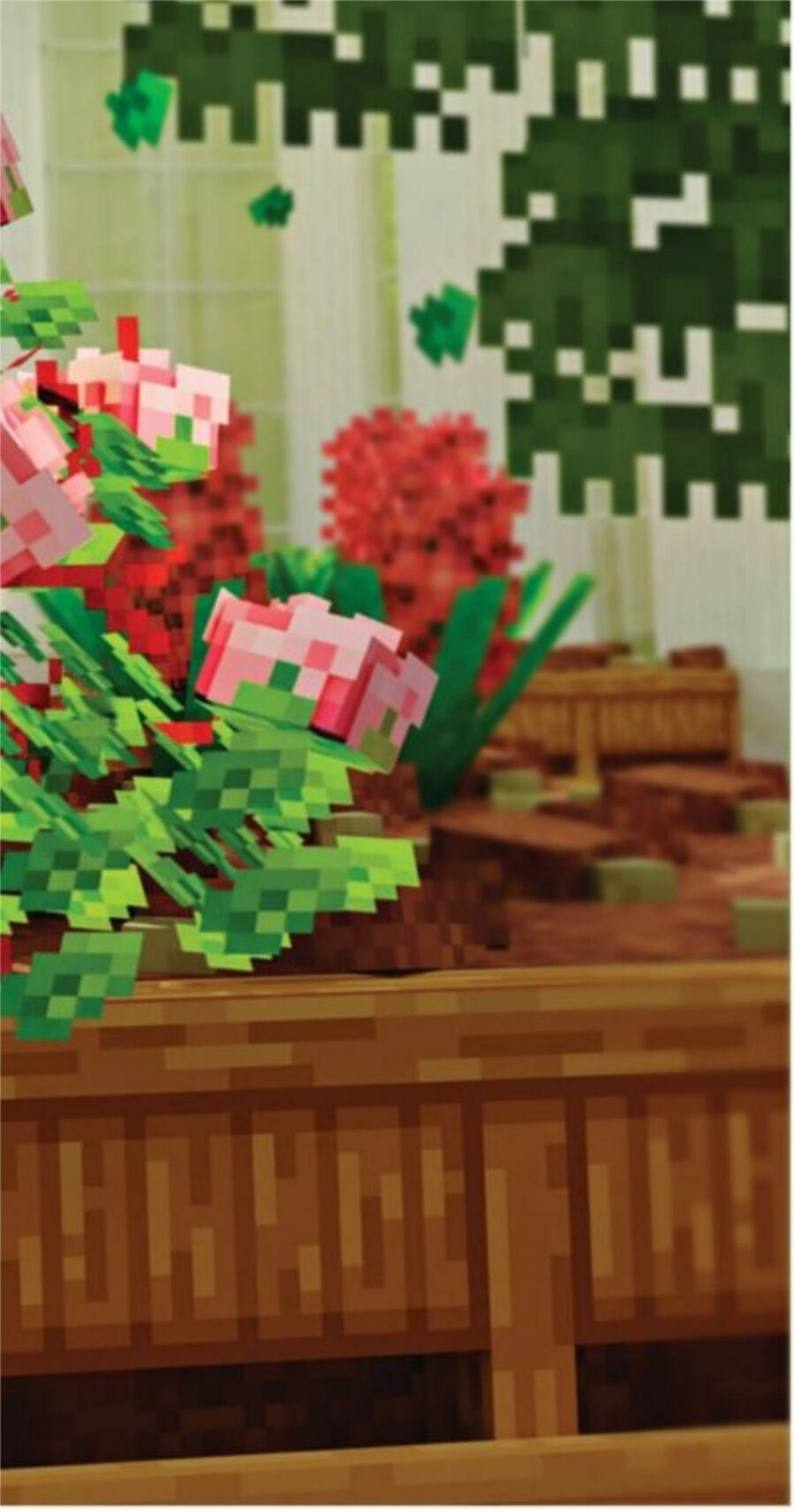
Beyond the titular Ice Dragons and Fire Dragons—so named for what they breathe—this mod adds a deep roster of creatures from the world of mythology. The friendlier creatures include a Hippocampus that can be trained and ridden. The cockatrice is a big chicken that fixes you with a death stare. The siren that once tempted Odysseus can now send her song your way.

JADE

This mod brings a simple utility to the game by telling you what it is you are looking at. For years many looking for help with this turned to a popular mod called HWYLA (here's what you're looking at). But after a certain point its creator stopped updating the mod and moved on to other projects, which fans seemed to have a hard time accepting. The page for downloading HWYLA now has an exquisite rant that includes such phrases as "Requests and demands for updates will be ignored" and "Look, Mom, I'm on TV" and "Is this long enough to be noticable [sic] yet?"

MINECOLONIES

For all you wannabe mayors out there, this popular mod is like a Minecraft cousin of Sim City, in which you take on the responsibilities of running a small town. As leader, your challenges include raising an army to help protect your city from the mobs that come to lay siege.



Fun mods include Bloom (left), DecoCraft (top right), and Highrise Miami (bottom right).

DECOCRAFT

If you're okay fighting off mobs but what you'd really like to do is decorate, this adds 300-plus options for personalizing your Minecraft home. This can look like you're auditioning for a spot in *Architectural Digest*, with white sofas and soft lighting—or you can add a rec room with barstools and a foosball table.

OH THE BIOMES YOU'LL GO!

This mod adds 80 biomes to the game—more biomes than you might have imagined existed. You'll be free to wander among them all: Mangrove marshes, red rock mountains, a savanna dotted with baobab trees, the bayou, an aspen forest, a polluted lake . . . Well, maybe that last one you want to avoid.

DWARVEN MINING COMPANY

This is one of many options for amping up the action-adventure aspects of the game. Here you can seek treasure, fend off goblin raids, hit the pickaxe store, and mine titanium (a real-world mineral) and mithril (an import from J.R.R. Tolkien's Middle-earth). You can also seek to gain an audience with the Dwarven Kings.

WORLD OF CARS

Exploring the world on foot gets a little tiring. This mod invites you to explore America via all manner of motorized vehicle, from motorcycles to dump trucks, sports cars to vintage vans, as you career through landscapes ranging from urban to Western.

HIGHRISE MIAMI

If you are looking for proof that you can do pretty much anything you want in Minecraft, this mod makes the case by taking you to this modern fantasy world, one in which you live in a high-rise apartment that you can decorate with 50 pieces of furniture. Then you can walk on the beach and watch the sunset before heading off to a velvet-rope club party and hitting the dance floor. ▯

Christ the Redeemer,
Rio de Janiero, Brazil

BUILDING EVERYTHING ON EARTH

At the dawn of the pandemic, a YouTube star issued a challenge to Minecrafters to replicate all the constructions of human civilization. Four years later, they are still going strong

BY BILL SYKEN

GO BACK TO MARCH 2020, IF IT'S NOT too painful a memory. Schools are shutting down. Restaurants are closed. If someone coughs within five feet of you, you wonder if you've just been exposed to a fatal disease. Life moves inside, and for many people, it goes increasingly online.

It was in that dark moment, when some people were turning to such diversions as learning to make sourdough or bingeing TV shows they never got around to watching, that a popular YouTuber named PippenFTS issued a challenge to the Minecraft community: Lets rebuild the world, but do it in Minecraft. It was a challenge that was answered in record-setting numbers, and with spectacular results.

The project called Build the Earth was certified by the Guinness World Records in 2022 as the largest group build in Minecraft history, with more than 4,000 participants organized into more than 100 build teams. But more impressive than any record is what the participants actually created. Look at the loving detail in the rendering of Mont-Saint-Michel, a tidal island off Normandy, France, or so many of the other landmarks on these pages. It's the result of thousands of people spending a cumulative millions of hours stacking blocks and checking refer-

ence photos and occasionally searching out satellite images that were taken during the winter to find pictures of buildings not obscured by tree leaves, in order to get every detail right.

The whole project is a diamond that was created under extraordinary pressures.

Interestingly, PippenFTS' launch video made no reference whatsoever to the COVID-19 pandemic—the timing was an unhappy coincidence. The current events on his mind were two technical advancements in the Minecraft world that made the Build the Earth project possible.

The first was a mod called Cubic Chunks. This program made it possible, by altering the way terrains are created, to exceed Minecraft's built-in vertical limit for height and depth, which was 256 meters (839 feet). So under the old height limits, you couldn't render with perfect accuracy, say, the Eiffel Tower (984 feet) or the Empire State Building (1,454 feet). But with the Cubic Chunks mod, you could.

The other advancement was a mod called Terra 1:1, which, using data from Google Maps and other resources, was able to replicate the Earth's entire terrain in Minecraft. Combine those two mods, and suddenly a user could create a Minecraft world with the exact measurements of the one we live in.

The thing about the Terra 1:1 mod, though, is that it presented the Earth's terrain as a blank slate. Which struck PippenFTS as more of an opportunity than a crisis. He released a YouTube video which presented this blank slate to his fans and put forward a plan for what to do with it.

"As uniformly breathtaking as this map is, it shows the world today as if humans had never come to be," he said. He wanted to add to it all the progress and creation of human civilization. And he announced that, from his home overlooking the Puget Sound, he was going to start by building Seattle, and he urged others to join this undertaking.

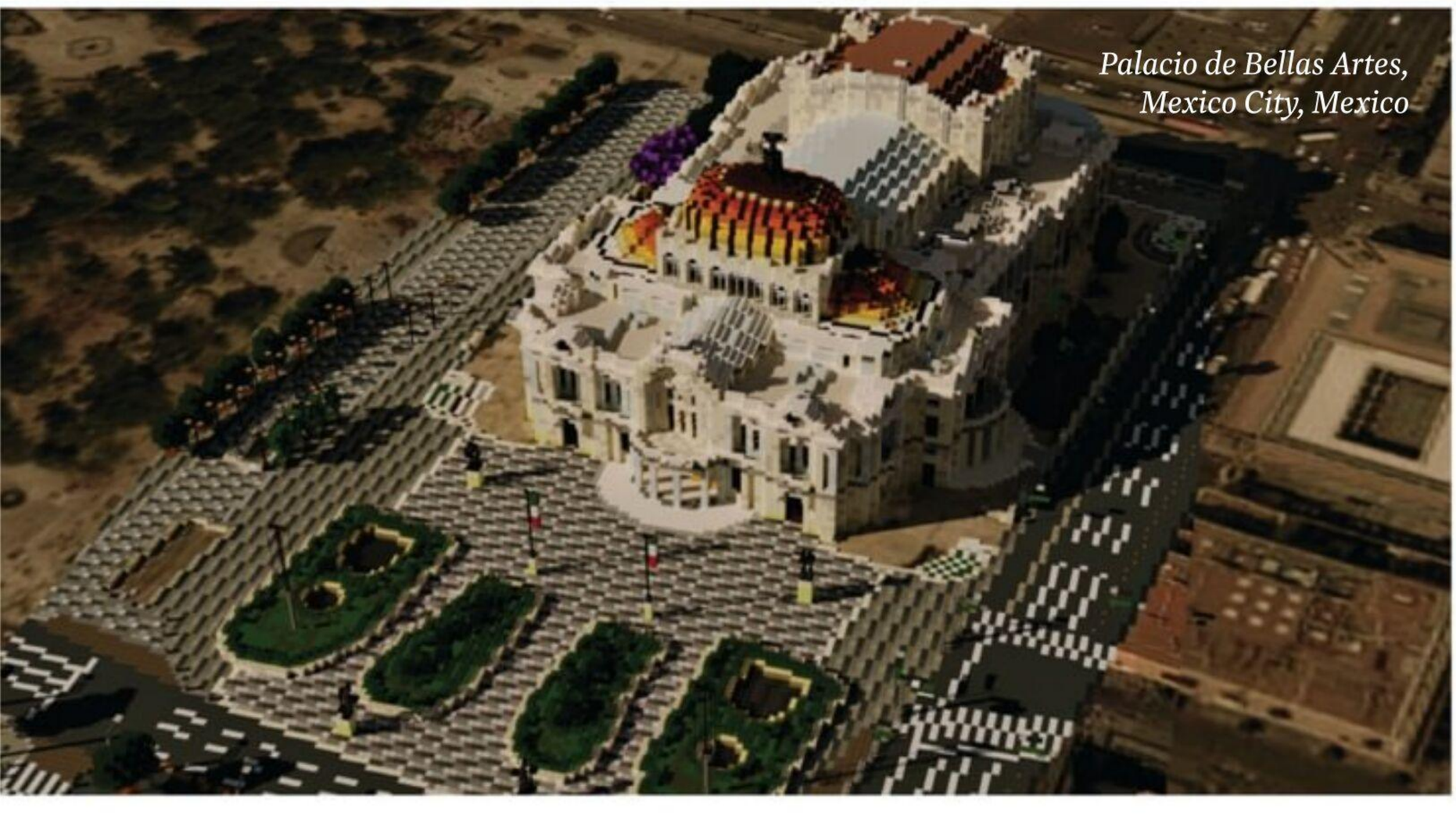
"I don't want to stand alone in this project," he said. "That's why I'm calling for all Minecrafters around the world, skilled builders and organizations, to join in on this effort."

With map-editing software, Build the Earth could then patch together everyone's segments. The goal was that ". . . one day, the Earth in Minecraft, with all human-made structures, all of our cities, all of our towers, cathedrals, railroads, museums, theaters, parks, and skyscrapers, all of it, is built and completed in one map that represents our innate human desire to create, to achieve, to persevere in a single visit-able and explorable Minecraft world. This

Mont-Saint-Michel, France

Buckingham Palace Gardens, London, England

The Atomium, Brussels, Belgium



Palacio de Bellas Artes,
Mexico City, Mexico

CN Tower, Toronto

The Golden Gate Bridge, San Francisco

would be the world to end all worlds, the single, most greatest collective achievement in Minecraft, and I want to see it done in my lifetime."

It was an ambitious idea, and a fresh one. Many of the largest Minecraft builds had focussed on recreating landscapes that are fictional, coming from Lord of the Rings trilogy or the Game of Thrones universe or even locations that appear in other video games rather than everyday reality.

Minecraft users responded to Pippen's call in droves. Pandemic restrictions had left them with time on their hands, and this seemed like a cool way to spend it. "COVID-19 was a major factor in my involvement in BTE," says Jacob Sherman of Stockton, California, who joined on day three of the project. "I was a senior in high school at the time, and we were in the midst of figuring out online school, but overall I had a lot more free time than normal due to the lockdowns." On the other side the globe in Singapore, a young student named Snek saw PippenFTS' video and had a similar reaction. "There was nothing much to do, and I had a lot of free time," said Snek, who is now 17 years old and the leader of Team ASEAN, which runs group builds for Southeast Asia and has more than 400 members. The builds that Snek has worked directly on include Clementi, the town where he lives.

That is how it was for a lot of people. They started local. In Hungary, Peter Garai, now 26 and with a masters in analytical chemistry, constructed Minecraft versions of the high-rise where his grandfather lives and the elementary school Garai had attended as a child. In Argentina, Aki, who is now 21 years old and a mechanical engineering student, began to build the Retiro, a major train station in Buenos Aires, and then moved on to the surrounding neighborhood. He says, "I believe it's the perfect place to have ended up working on, because it includes every type of thing there is to build."

For Bruno Gideon Bergheim, 32, from Heidelberg, Germany, his first build took him to a treasured memory of the past—a village in Uganda called Kiyumbakimu, where he had done social service work for a year after high school. "I thought: Nobody else is going to build that and I can delve into the nostalgia," he says.

Now Bergheim rarely builds at all, but he still works on Build the Earth as an administrator and manager, working on the technical side but also helping mediate the inevitable conflicts that crop up in any team project, and especially one with so many young people involved. "If you imagine that

14- to 16-year-olds are basically managing virtual countries with thousands of members, you can imagine that conflicts arise and differing interests clash," he says. "For me it was and still is amazing to see younger people stepping up to challenges that many adults would struggle with and dealing with them in amazing ways."

A common theme among users is that they take pride not only in what they've built but the skills they have developed in problem-solving and collaboration. And in a time when people were separated from their classmates, they found a new set of online friends. CrazyCow, a 16-year-old from Wellington, New Zealand, says, "Some of the bonds that I have made with people from the project are better than the ones I have with real life friends, and that says something."

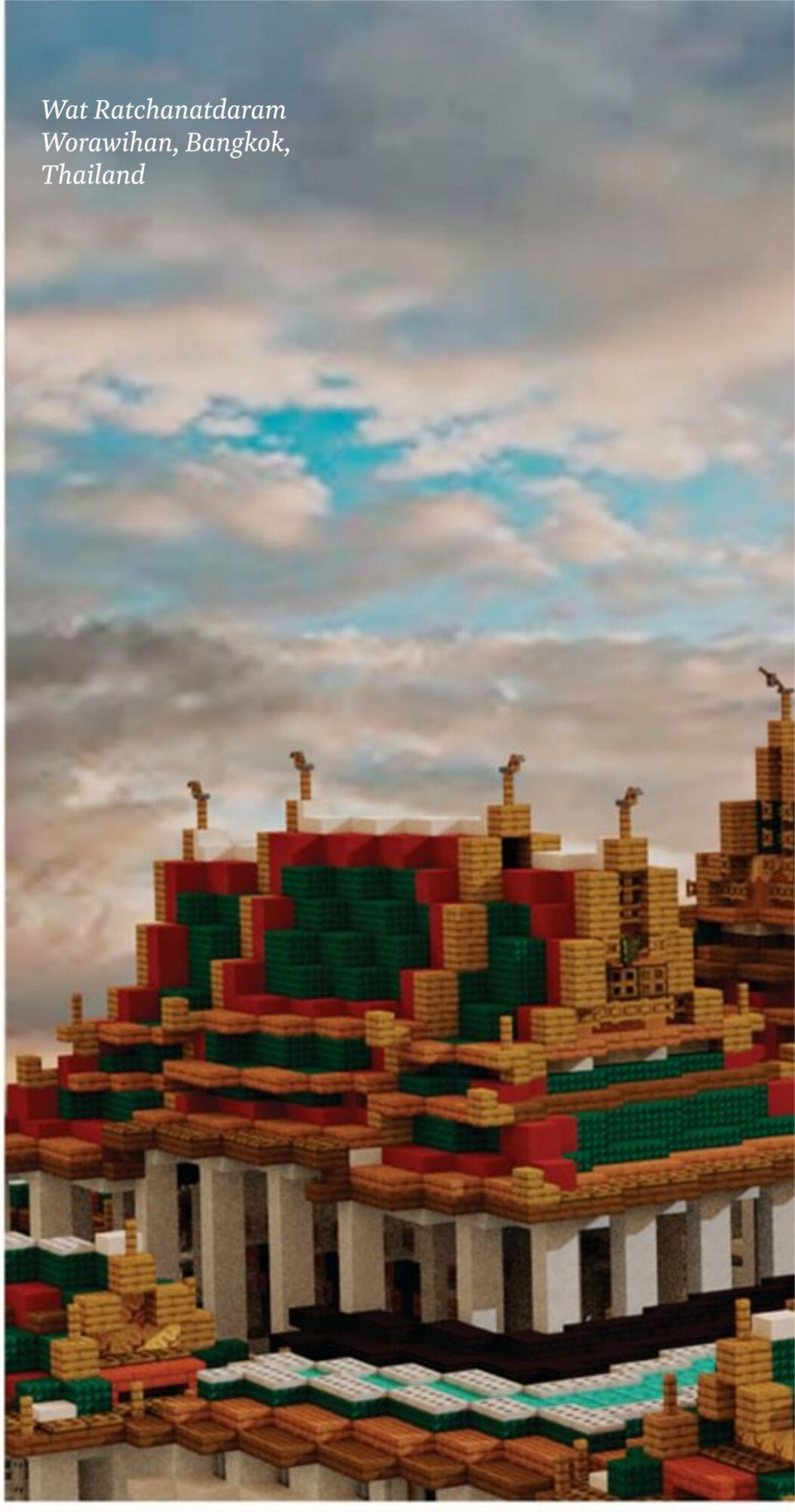
PippenFTS, the YouTube star who started this whole thing, watched the Build the Earth scale up with amazement. Now 34 years old, he remembers a comment which caught fire on the project's Discord: "A week into COVID and we've already re-created the outside world." He says one aspect of Build the Earth he found particularly surreal was that, after re-creating so much of Seattle for his builds, it was very strange to walk downtown and see those same buildings. "It's a feeling that I can't describe, he says, "It's like an overlay in your mind."

Build the Earth inevitably saw its participation dip from its pandemic heights, but the project is still going strong. "People always still want to play games," Pippen says. "We always make time for it. For that reason, we always had a user base that continually returned."

One person who has left the project, though, is Pippen himself. He attributes it to a rift that relates to his original goal of replicating every building on Earth. He wanted to use AI to replicate the less interesting of the Earth's billions of buildings. "The entire community was against it," he says. Rather than being focused on a complete map, he characterized the general attitude as "Let's just make things as beautiful as possible."

So he has moved on to new YouTube projects, and he says he's fine with the way it all turned out. "It's really important to do what you love and enjoy what you do, and the best part of this entire experience is creating a community where a bunch of people found what they love."

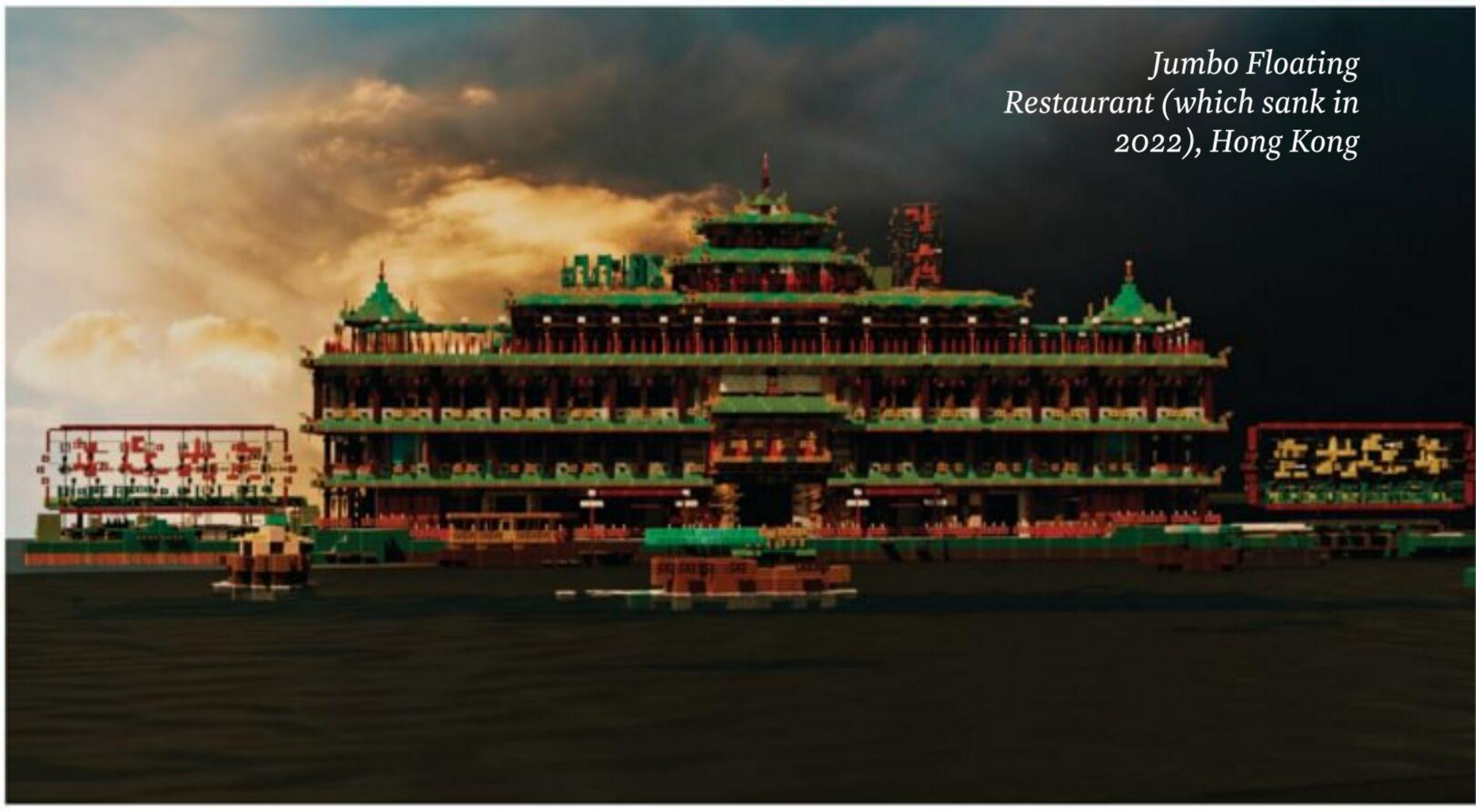
And looking at the magnificent creations of Build the Earth, the love that went into it is impossible to dispute.



Wat Ratchanatdaram Worawihan, Bangkok, Thailand

Marina Bay, Singapore

Jumbo Floating Restaurant (which sank in 2022), Hong Kong



Qasr Ibrim, Egypt

Dunedin, New Zealand

TIME

Editor in Chief Sam Jacobs
Managing Editor Lily Rothman
Creative Director D.W. Pine

MINECRAFT

DOTDASH MEREDITH PREMIUM PUBLISHING
Vice President, Editor in Chief Kostya Kennedy
Creative Director Gary Stewart
Associate Photo Director C. Tiffany Lee
Editorial Operations Director Jamie Roth Major
Editor Bill Syken
Senior Art Director Lan Yin Bachelis
Photo Editor Steph Durante
Writers Isabella Biedenharn, Clark Collis, Stephen Deutzmann, Trone Dowd, Darren Franich, Richard Jerome, Harry McCracken, Chris Nashawaty, Jared Newman, Matt Patchuck, Barbara Kimberly Seigel, Bill Syken, Olivia B. Waxman
Manager, Editorial Operations Gina Scauzillo
Associate Manager, Editorial Operations Ariel Davis
Copy Chief Tracy Guth Spangler
Copy Editor Joel Van Liew
Researcher Joseph Wilkinson
Production Designer Sandra Jurevics
Premedia Trafficking Supervisor Marina Ruppel
Director, Premedia Imaging Michael Sturtz
Color Quality Analyst Rob Roszkowski
Production Director Patrick McGowan
Production Managers Ashley Schaubroeck, Trevi Jones, April Gross
Senior Quality Director Joe Kohler
Associate Quality Director Jason Lamb

Vice President & General Manager Jeremy Biloon
Vice President, Group Editorial Director Stephen Orr
Senior Director, Brand Marketing Jean Kennedy
Associate Director, Brand Marketing Katherine Barnet
Senior Manager, Brand Marketing Geoffrey Wohlgamuth
Brand Manager, Brand Marketing Mia Rinaldi

Special thanks Gabby Amello, Brad Beatson, Nicoleta Papavasilakis

ADVERTISING AND BUSINESS
SVP & Group Publisher
Daren Mazzucca (daren.mazzucca@dotdashmdp.com)
VP & Publisher
Donna Lindskog (donna.lindskog@dotdashmdp.com)
Marketing Sandra Salerno Roth, Christine Austin

DOTDASH MEREDITH
President, Lifestyle Alysia Borsa

Copyright © 2024 Meredith Operations Corporation
225 Liberty Street · New York, NY 10281

All rights reserved. No part of this book may be reproduced in any form or by any electronic or mechanical means, including information storage and retrieval systems, without permission in writing from the publisher, except by a reviewer, who may quote brief passages in a review.

For syndication or international licensing requests, email syndication.generic@dotdashmdp.com. For reprint and reuse permission, email mmc.permissions@dotdashmdp.com.

Printed in the USA.

The portal to the Nether opens up a whole new world.

Credits

Front cover © 2024 Mojang AB. TM Microsoft Corporation

Back cover (clockwise from top) © 2024 Mojang AB. TM Microsoft Corporation; © Emily Michot/Miami Herald/TNS/Alamy; The Uncensored Library

1 Courtesy WesterosCraft **2-3** II.studio/Shutterstock **4** Lars Niki/Corbis/Getty Images **5** © 2024 Mojang AB. TM Microsoft Corporation **6-7** Robert Kluba/REA/Redux **9** Ints Kalnins/Reuters/Redux

Chapter 1

10-11 Mike Nelson/EPA/Shutterstock **12-13** Aorta for TIME **14** Kitfox Games **15** Emma Johansson/DN/SCANPIX/TT News Agency/Alamy **16** Block by Block team (4) **18-19** © 2024 Mojang AB. TM Microsoft Corporation **20-21** Rebecca Andrews/Shutterstock **22** © 2024 Mojang AB. TM Microsoft Corporation **23** Joe Raedle/Getty Images **24-25** © 2024 Mojang AB. TM Microsoft Corporation **26-27** Sam Ruttyn/Newspix/Headpress/Redux **28** (clockwise from top left) Xavier Collin/Image Press Agency/Alamy; Emma McIntyre/Getty Images (2); Rodin Eckenroth/FilmMagic/Getty Images **29** © 2024 Mojang AB. TM Microsoft Corporation (2) **30** ArcadeImages/Alamy **31** Mikhail Grachikov/Shutterstock **32-33** Francesco Guidicini/Camera Press/Redux **34-35** James Ellerker/Guinness World Records/© UPPA/ZUMA Press **36** Courtesy Jared Berkompas **37** Courtesy Aphmau **38-39** Christina Gandolfo/The New York Times/Redux **41** Nils Jorgensen/Shutterstock

Chapter 2

42-43 Luke MacGregor/Bloomberg/Getty Images **44-45** © 2024 Mojang AB. TM Microsoft Corporation **46-47** Aubrey Gemignani/NASA **48-49** © 2024 Mojang AB. TM Microsoft Corporation (7) **50-51** (from left) Fred Marvaux/REA/Redux; © 2024 Mojang AB. TM Microsoft Corporation (2) **52-53** (from left) © 2024 Mojang AB. TM Microsoft Corporation; Edwin Tse/The New York Times/Redux **54-57** The Uncensored Library (3) **58-59** UNITED24 (2) **60-61** Rozette Rago/The New York Times/Redux **63** Carlos Osorio/Toronto Star/Getty Images **64-65** Courtesy Autcraft

Chapter 3

66-67 Gamemode One/© 2024 Mojang AB. TM Microsoft Corporation **68-71** © 2024 Mojang AB. TM Microsoft Corporation (2) **72-73** MattuFIN **74-75** Courtesy WesterosCraft **76-77** (from left) Courtesy ChrisDaCow; Courtesy ArdaCraft **78-79** KAIZEN87 TEAM **80** (from top) Dan Lynch (Lynchinc); Elysium Fire **81** Built by TomOnMars **82-83** Gamemode One/© 2024 Mojang AB. TM Microsoft Corporation **84-85** (clockwise from left) Gamemode One/© 2024 Mojang AB. TM Microsoft Corporation; Razzeberries/© 2024 Mojang AB. TM Microsoft Corporation; Noxcrew/© 2024 Mojang AB. TM Microsoft Corporation **86-87** BTE Brazil **88-89** (clockwise from top) BTE France; Build Benelux; BTE UK **90-91** (clockwise from top) BTE Canada; BTE USA; BTE México y Centroamérica **92-93** (clockwise from bottom left) Team ASEAN (2); BTE Hong Kong-Macau **94** (from top) Africa Rebuilt; BTE Oceania **95** Wirestock, Inc./Alamy

96 © 2024 Mojang AB. TM Microsoft Corporation

CLOSING WORDS

Slay the Ender Dragon and You Get to Read a Poem

Minecraft doesn't have a formal "end" in which you complete a task and the game is over, but if you go to the End dimension and slay the Ender Dragon, it can certainly feel that way—especially when the words of the lengthy End Poem appear onscreen. The work was commissioned by game creator Notch Persson from Irish novelist Julian Gough, and it's a beatific head trip about gaming and reality, with lines such as "The universe said you are the universe tasting itself, talking to itself, reading its own code." It's quite something, really, definitely recommended reading. (If you don't have the patience to slay the dragon, you can also receive the text by entering your email address at theendpoem.com.) Its 1,500 words conclude with an incantation: "And the player was the universe. / And the player was love. / You are the player. / Wake up."

A WORLD LIKE NO OTHER

Minecraft's virtually infinite possibilities inspire players to build to their imagination's desire. With an appeal that spans age groups and environments—living room to schoolroom—Minecraft has sold 300 million copies since its debut 15 years ago. There's always more to discover and create.